



*Hand*

**A N A L E C T A :**  
**OR, A**  
**COLLECTION**

Of some of the  
**Choicest Notions,**

**AND**

What seemed most Remarkable in more  
than forty Authors, *Philosophical, Chy-*  
*mical, Medical, Astronomical, Histori-*  
*cal, &c.*

**WHEREUNTO**

Is added an Appendix, containing short, but  
very profitable and delightful Rules in ma-  
ny parts of the Mathematicks.

---

**By T. B. Gent.**

---

**L O N D O N,**

Printed for **Richard Cumberland** at the  
*Angel* in *St. Paul's Church-yard.* 1693.

ANNALECTA:  
OR A  
COLLECTION

Of some of the  
Choicest Notions

AND

What seemed most Remarkable in more  
than forty Authors, Philosophical, Phy-  
sical, Metaphysical, Astronomical, Histori-  
cal, &c.

WHERETO

I added an Appendix, containing  
very particular and detailed Notes in  
several parts of the Mathematics.

By T. B. GORE

LONDON

Printed for J. Sturges, and sold at the  
Shop in St. Paul's Church-yard, 1703.



# ANALECTA, O R COLLECTIONS, &c.

## COLLECT. I.

*Out of Mr. Robert Hook's Lectures, &c.*

**M**R. Edmond Halley, in a Letter from St. Helena, 15, 55. South-Latitude, to Sir Jonas Moor, says, There are three Stars of the first Magnitude that never appear in *England*; but none near the South-Pole of any brightness, except one of the third Magnitude, which is about ten degrees distant from it. The two *Nubeculae*, call'd by the Saylor, the *Magellanick Clouds*, and are exactly like the whiteness of the *Milky-way*, lying within the *Antarctick Circle*; they are small, and in the Moon-shine scarce perceptible; yet in the dark, the biggest is very notable. In the *Torrid-Zone*, he found no Weather that is hotter than the Summer of *England* is ordinatily.

Mr. Halley

Mr. Halley was employed by Sir Joseph William-  
son, and Sir Jonas, to take strict Accounts of the  
Southern Stars and Constellations, page 75.

See there also the Honourable Robert Boyle's Ac-  
count of Mr. Craft's Noctilucous Matter, and Bald-  
winus's Phosphorus, which wou'd shine in a Vacuum,  
and requir'd not the presence of Air, as some pieces  
of shining Wood do, p. 64.

These Noctiluca's are Artificial Substances, that  
shine without any precedent Illustration.

The Revolution of Jupiter about its Axis (ob-  
served by Monsieur Cassini and others) is effected in  
9 Hours, 56 Minutes. It hath for an Index of its  
motion one principal spot, which is neatly distinguish-  
ed from the rest of its surface, and represents the  
Figure of the Caspian Sea, p. 78.

Mr. Leewenhoeck, of Delft, in a Letter to the Se-  
cretary of the Royal-Society, Octob. 5. 1677. says,  
He by his Microscopes discovered in Pepper-water,  
&c. 10000 Animalcules in a quantity of Water as  
big as a Grain of Millet; 92 of which go to the ma-  
king up the bigness of a green Pea, p. 81. p. 85. He  
says, That the uniting of the Globules of the Blood  
are the reason of the accident which is called the  
cold Fire, and of that which causes the Hands or  
Fingers to be lost by cold.

Dr. Graff open'd the Vein of a Dog, and let out  
so much Blood that the Dog grew faint; then he  
opened the Artery of another Dog, and by a Pipe  
transfus'd the Blood of the second into the first;  
whereby the first recovered, the second was faint.  
Then the Dr. injected back into the Artery of the  
second a quantity of Cows Milk, supposing thereby  
to preserve the second Dog alive, saying, Milk was  
Blood; but no sooner was the Milk injected, but the  
Dog dyed. 85, 85.

Most of the Animalcules seen in Pepper-water, were much less than the thousandth part of the thickness of the Hair of ones Head, and three or four times as long as thick, p. 88.

Touching Microscopes : The less the Spheres of the Glasses be, the more do they magnifie the object; and the clearer and brighter they be polish'd, the clearer do they represent the object; and the longer the Glasses are distant from each other, the more is the Image magnafid, *cæteris paribus*, p. 100.

If we compare the Magnitude of one of the little Animals to a whole, we shall find it smaller in comparison, than the body of an ordinary Whale to the body of the whole Earth. If the Creature be so small, what must we think of the Muscles, Joynts, Bones, &c. 103.

One Mr. *Williamson* in *Cornwall*, afflicted with the Collick, for his cure swallowed three Pistol-Bullets, two he afterwards ejected, but the third descended into the *Aspera Arteria*, whereof, after a year and an half, he died, 105.

See there also Dr. *Bidgood* of *Exeter*, the Western *Apollo's* Opinion, and Dr. *Mayor* of *Bath*, for the Recovery of the Patient.

The Twilight is sometimes longer or shorter upon the account of the Variation of the Atmosphere, which is sometimes higher, and sometimes lower, page 6.

Some Comets are more distant from the Earth than the Sun, 26. and they are suppos'd to move in a Curve, and not in a right Line, as *Kepler* suppos'd, 30. Some think Comets as old as the World, p. 33. The generality of Philosophers now embrace the *Copernican Hypothesis*, especially as it is rectified and refined by the ingenious *Kepler*, 36.

Larger Telescopes for the Night have Eye-glasses capable of taking in an Angle of about two degrees

at once, 39. A Comet is not extinguish'd or burnt out, when it ceases to appear, for with Telescopes it hath been seen a Month after it disappear'd to the naked Eye, 44.

It is a hard matter to determine, whether the Light of a Comet proceed from its own Nature? whether that be somewhat of that of the Sun and Stars; or of that of our Fire, or of that of decaying Fish, rotten Wood, Glow-worms, &c. or of that of the *Ignis fatuus*, at Land or Sea; or like that of a Sea-water, or a Diamond rub'd; or like that of falling Meteors, or Star-shoots, &c. 46.

Gold is the heaviest of all Terrestrial Bodies, and is dissolv'd by *Aqua Regis*, 51.

## COLLECT. II.

*Experiments touching Colours, &c. by the  
Honourable Robert Boyle, Esq;*

**H**EAT and cold are said to be the right and left hand of Nature, *Preface*.

The Author justly admires that gaudy Plant, the marvail of *Peru*, which in its Season produces almost daily divers scores of fine Flowers, and yet scarce any two of them are ting'd or colour'd alike. This and the like Instances makes the Author dislike the Hypothesis of Chymists that affirm, That a diversity of Colours does constantly argue a diversity of Nature in the Bodies wherein they are conspicuous. 45, 79. Steel puts on various Colours, as it varies its Temper. See notable Things thereof, 6.

Colour is modify'd Light, which mingled with shades, or other ways, strikes upon the Organ of sight,

fight, and so causes that Sensation, which we call Colour.

It is true, that Colour depends also efficiently upon the visible Body, in respect of the Disposition of the Superficial Particles; which modify the Light, and sends it Reflected or Refracted to our Eyes, thus and thus altered, and not otherwise, 10.

A Vomit Cures the Giddiness, occasioned by the motion of a Ship; and is good against Pestilential Fevers, being administered before Nature is too Succumbent, 15.

Those that observe the Sun through a Telescope, look on it through a Thick, Red or Blew Glass, to make it's Splendor, Supportable to the Eye, else it will offend and put out the Eye, 16 19. One that looked fixedly on the Sun without the Glass to Screen the Eye, had his Eye so Vitiated, that for Ten Years after, when he look'd on a Window, or any white Object, he fancy'd he saw a great Globe of Light like the Sun, 161.

The Surface of no Bodies, is smooth in a strict Sense; but only in a popular Sense, 26.

The Greatest Magnifying Glass in Europe, 27.

Dr. J. Finch, told the Honourable Robert Boyle, he had near *Maestricht*, seen one *John Permaesen*, a Blind Organist, that could Distinguish Colours by the Touch, by the more or less Asperity. Black and White are the most Asperous, Red most Smooth, and least Asperous, excepting Blew. 44, &c. He could best Discriminate the Colours fasting in the Morning, 47.

The Scent or Smelling Faculties in Setting-Dogs, which is impaired by some kind of Aliments. 47.

Old pieces of dirty Gold, are Restored to a clean nitid Yellow, by putting them into the Fire, or *Aquafortis*, which take off the Adventitious Filth,

Opacous Bodies can only Reflect the Beams of Light, but Bodies Diaphanous, can refract them too, 69.

The Gaudy Flowers of the Mervail of *Peru*, are of short Duration, often Fading the same Day they are Blown. 79. See 4, 5. and so doth an other *Virginian* Flower.

The *Russian* Journey in Winter, is by day two Mountain Miles, 1, 2. 12 *Italian*, and by Night twice so many 100. Snow and White Bodies reflect more Light then others: So Guides in Dark Nights do wear something of white to be Discerned by, 102.

Silver is made bright and white, by Decocting it with Salt and Tartar, 115.

Black Bodies are more Susceptive of Heat than White; because those Reflect the Beams inward, but these outward, in Hot Climates Eggs black'd over and exposed to the Sun, are in a little time well Roasted, 130. Hence 'tis that Rooms hung with Black are warmer than others.

The Phylosophical and Chymical Rule, *Adusta, Nigra, Perusta, Alba*, is not universally true. 139. for Charcoals made of the Wood of *Oxycedar* are White, as the Judicious Traveller *Bellonius* Affirms.

That a Solution of Silver will Denigrat Hair is a known Experiment. 150. The *Danes* are a Whiter People generally, than any in the whole Universe. 154. See there also a Discourse of the Blackness of *Negros*.

In *Russia*, Foxes and Hares that are Red, Black or Grey in *Summer*, become all White in *Winter*. 156. By reason of the Cold as some think.

The Principal Cause of the Blackness of *Negros*, as the Author thinks, is some peculiar Seminal Impression, 161.

The Author has seen a *Raven* perfectly White, for Bill and Feathers, 162. The

The *Chineses* have all little Feet, *ib.*

The Blackness in *Negrees*, is no deeper than the *Epidermis*. The *Negro* Children come not Black into the World, but Red, like the *Europeans*; but in not many Days become Black. 164. Black Cloaths are Susceptive of no other Colour, but White Receives all. 172. Colours are best Explicated by Mechanical Principles, as Position and Texture of the Minute Parts, &c. in Reference to the Light and the Eye.

A Prismatical Glass (in a Darked Room especially) will Project on a Wall or other Body, a very vivid Iris, and one may observe the several Reflections and Refractions, which the Incident Beams of Light suffer in Rebouncing from, and passing through it. 191. *Lignum Nephriticum*, infused in fair Water, affords the most effectual Remedy against the Stone. 199. It will tinge Water, and give it many Colours.

The Simple or Primary Colours that Painters use, are but five, White and Black, Red and Blew and Yellow. Those variously Compounded, exhibit a prodigious Variety of Colours. Black and White, make a vast Company of Grays. Blew and Yellow, a great Variety of Greens. Red and Yellow, make Orange Tawney. Red with a little White, makes a Carnation, 220.

A Skillful Painter, with those simple Compositions, can produce what Colour he pleases, and many more, than we have yet Names for, *ib.*

A large Feather or Black Ribbon, held at a fit distance between the Eye and the Sun, when he is near the *Horizon*, there will appear a variety of little Rainbows of very vivid Colours, 245.

The *Islands* of *Banda* are Famous, as well as Rich, by being the almost only places where Cloves will prosper. These Fruits are first White, afterwards



Green, and then Reddish before they be beaten off the Tree, after which being dry'd before they are put up, they grow blackish as we see them. The Flower grows upon the Top of the Glove, Consisting of four small Leaves, like a Cherry Blossoms, but of an excellent Blew, 269.

A Body changeth its Colour, when its Texture is changed, then the Transposed parts do Vary and Modify the incident Light, otherwise then they did, when the matter appeared of another Colour. 275.

The Mountebank Water-drinker, does all that Men so much admire, partly by a few Chymical Preparations by the Shape of Glasses, and partly by Craft and Legeidemain. 336.

*Oculus Mundi*, is a rare Stone, which if immersed a while in Water from Opacous, will become Transparent, and will re-acquire an Opacity again, by leaving it a while in the Air. 410.

One Mr. Clayton, brought with him from Italy (as Mr. Boyle saith, that made Tryal of it) a Diamond that being rubbed, doth vividly shine in the Dark. 401. The shine was more languid, than that of the Glow-worm, by which Mr. Boyle hath been sometimes able to read a short word.

The Shine of the Stone, would manifestly decay upon the Ceasing of the Affriction. It appeared most Luminous, after it had been well rubbed upon White or Red Cloaths. Mr. Boyle hath a Diamond on his Finger, which by a brisk Assiduous Affriction, would disclose a Light, and Shine, though not equal to that of Mr. Claytons, nor so durable, 422.

*The Origine of Forms and Qualities, according to the Corpuscular Philosophy, &c. By the same Author.*

Many Ancients and Moderns, as *Lucretius*, *Vernanius*, *Basso*, *Des Cartes* and his Followers, *Gassendus*,  
the



the two *Boois*, *Magnenus*, *Pemle*, *Helmont*, &c. have professedly opposed the *Aristotelean* *Physicks*, &c.

The *Corpuscularians*, with the Generality of Philosophers, allow one Catholick or Universal matter common to all Bodies, *i. e.* a Substance Extended divisible and impenetrable. The Diversity we see in Bodies, proceeds from Motion, and the Origine of Motion in Matter, is from God, 4.

Local Motion seems to be the Principal amongst second Causes, and the Grand Agent of all that happens in Nature; for though Bulk, Figure, Rest, Situation and Texture, do Concur to the *Phenomena*, yet in Comparison of Motion, they seem to be but *Effects*, or but Requisites, or Causes, *sine quibus non*.

There are three Essential Properties of each, tho' insensible part of Matter, *viz.* Magnitude or Seize, Shape, and either Motion or Rest; for betwixt them two, there is no Mean, 6.

True Gold is easily dissoluble in *Aqua Regis*, but *Aqua Fortis* will not work upon it, which is one of the most Distinguishing Properties of True Gold, 12. The *Corpuscularians*, in their Rejection of Substantial Forms, except the Reasonable Soul, and the Soul of Brutes.

Gold is held to be Indestructible, but the Author is Master of a Menstruum, that will in part, change some part of it into an other Metalline Body, 14.

Tis certain that matter is frequently divided into insensible Corpuscles (especially by Chymical Operations) yet the Minuteest Particles, as well as the biggest Masses of the universal matter, have their Bulk and Shape, 6.

It is made out by Experiments, that almost all Qualities which the Schools refer to Substantial Forms, may be produced Mechanically, *i. e.* by Corporal Agents, that work by vertue of the Motion, Size,

Size, Figure and Contrivance of their parts, which Attributes are called Mechanical; because to them Men, refer the Various Operations of Mechanical Engines Preface. So that new Qualities are produced in a Body, by changing the Texture or Motion, or some other Mechanical affection thereof.

Beaten Glas is Deleterious, not by any real quality distinct from it self, but being a hard rigid Body and Angular, it Excoriates, grates upon the tender parts, Stomach and Guts, &c. 18. The Mechanism of a Watch, See 20. Heat is but the brisk Confused Local motion of the minute parts of a Body, *ib.* There are Spherical Speculums, that Exhibit the Images of the Objects in a Room, round about very pleasantly, 21.

By the Texture of a Body, we must understand the Disposition and Contrivance of its parts, that Compose it, and this Texture or Disposition of Parts doth Emerge from the Modes or Accidents of Matter, *i.e.* Size, Shape, Motion or Rest, Posture and Order. 26.

Of the Echo. 23.

The Chymists *Luna Fixa*, or fixed Silver, as they say, wants not the weight, the Malleableness nor the fixedness, nor any property of Gold, except the yellowness; which makes them call it white Gold, 42.

A Body is what it is, and differs from another Body, not by a Substantial Form distinct from Matter, but by a particular Convention of Accidents, which do Denominate and Constitute a Body of this or that Specifical or Determinal kind, 43.

This Aggregat of Accidents in a Body, the *Corpuscularians* call the Form of the Body.

*Quicksilver* will put on a great variety of Forms and Disguises, and yet remain true Mercury, 48. Water becomes Ice, by loosing the wonted Agitation of

of its parts, 50. Two pieces of Resinous Wood, by a long and vehement Attrition, one against another, may be set on Fire. Generation is principally performed by Convention of Corpuscles, Corruption by Dissolution and Particles. And Alteration by Transposition of Particles, 52.

In Generation, there's no new Substance produced, but only that which was pre-existent, obtains a new Modification or Manner of Existence.

Musk is made in *China*, and the Levant of the purified parts and flesh of an Animal (whether it be a kind of large Rabet, or a very small Hornless Deer, 59. The Flesh of the Animal after Death, acquires a grateful Smell.

A Summary of the Hypothesis, see in the 64th. p. Arguments *ad Hominem*, are such as are drawn from the Authority of Men or Principles, owned or granted by the Adversary, and not such as are drawn from Ratiocinations, or the Nature of Things.

*Epicurus* plainly denied, that the World was made by any Deity (for Deities he own'd) and affirm'd that Motion was congenit to matter, and that this well Contriv'd Fabrick, the World is the Result of the Casual Concourse of singly *insensible* Atoms.

The Opinion of *Descartes*, according to his Hypothesis, seemsto maintain: That God having once put Matter into Motion, and Established the Laws of that Motion, needed not more particularly interpose or concern himself, for the Production of things Corporal, nor even of Plants or Animals, which according to him are but Engines. In these Points, the Honourable Author differs from both, and thinks it utterly improbable, that Brute and unguided, tho' moving Matter, should ever convene into such admirable Structures, as the Bodies of perfect Animals, 102, &c.

The primary Particles of Matter ( which some call

call *Minima*, or *Prima Naturalia*) are too small to be, whilst Single, Sensible, yet they have their Determinate Shape, and are very Solid, insomuch, that tho' they be Mentally Divisible, and by Divine Power, yet by reason of their Smallness and Solidity, Nature doth scarce ever divide them.

There are also *Corpuscles*, which are made up of the Coalition of several of the former *Prima Naturalia*, and whose Bulk is so small, that they are singly below the Distinguishment of Sense.

These are very Rarely, Actually Dissolved or Broken by Nature, and are the seeds and immediate Principles of many sorts of Natural Bodies, as Earth, Water, Salt, &c. 47.

Ice beaten with Common Salt, will freeze other Bodies, yet Water mingled with Salt, will not, 109.

Silk-worms are first small Caterpillars, and then *Aurelias* or Husked Magots, and then Butterflies. These are the Successive Productions of the Prolifick Seed or Eggs of Silk-worms. Silk-worms may be Hatch'd by the Heat of Human Bodies. And Chickens in *Egypt* are Hatch'd by the Heat of Ovens and Dunghills.

'Tis certain that Coral grows in the Bottom of the Sea, and whilst under Water, is soft and tender like other Plants; and yet being gather'd and remov'd into the Air, it turns into a Lapideous Concretion. 136.

There's White Coral as well as Red, 138.

Sir *John Lancaster* Relates, that at *Sombrero* an Island in *East-India*, he saw a Tree, whose Root was Worm, and as the Tree grew, the Worm Diminished, and when the worm was wholly Transmuted into the Tree, it Rooted into the Ground. The greatest wonder he saw in all his Travels. The Tree pulled up, when it is dry, turns into a hard Stone like white Coral.

The Industrious *Piso*, in his excellent History of *Brazil*, asserts the Transformation of a sort of Animals (not much unlike Grass-hoppers) into Vegetables at a certain Season of the Year.

And *Michael Boym* a Jesuit, in a late Tract affirms, in the Island *Hanan*, which belongs to *China*, he saw Crabs or Crawfishes, which as soon as they were drawn out of the Water, did in a moment lose both Life and Motion, and became petrified.

Vegitables may be nourished by fair Water only in a Viol, they will there grow, increase in weight, and shoot out Roots, 160.

*Garcias ab Horto* (a Classick Author) was Physician to the *Indian Vice-Roy*.

— *Vincent le Blanc* was another *Coriat* and Rambler about the World, 175.

*Aqua fortis* is the Spirit of Nitre. Alkalizat Salts, are Salts made by the combustion of Bodies, 219. *Aqua fortis* & *Aqua regis* are Acid Liquors, made of Acid Salts, and the most potent *Menstruums*.

All Bodies are made of one Catholick Matter, common to them all, and differ but in shape, size, motion or rest, and texture of the small parts they consist of; from which Affections of Matter, the Qualities that difference particular Bodies, result, 234.

The Author thinks the Transmutation of Mettals not impossible, and hath really by the means of his *Menstruum peracutum*, and other things, chang'd Gold into Silver; and so he hath demonstrated that Gold it self is not indestructible, as the Learned have hitherto held, 236. 'Tis an Axiom among *Spagyrist*s, *Facilius est Aurum construere quem destruere*, 242.

Water is transmutable into Earth, or a fine white powder, as small as the finest Hair Powder, 265. Earth in weight doth surpass Water of the same bulk but twice and a little more than a sixth part, 267.

*Van Helmont* makes Water the material Principle of all Bodies here below, which he wou'd have to be either Water it self, or but Water disguis'd by those forms, which the seeds of things have given it. His Liquor *Alkabeſt* would reduce all Bodies into a fluid, no way differing from Rain-water, 271.

The *Mechanical* Principles, Motion, Bulk, Shape and Texture of the minute Parts of Matter do,—under the guidance of Nature ( whose Laws are establish'd by the All wise God ) produce all the changes and qualities that are obvious in natural Bodies, 289.

A perfect Sphere can touch a perfect Plane but in one point, yet by means of that point, the Plane receives the Action of the Gravity of the whole Body.

### COLLECT. III.

*Observations deduced from the Cælestial Globe.*

**A** *Reſturus* is a Star of the first Magnitude in Boots, and Boots follows the Tail of the great Bear.

*Cor Caroli* is a Star of the second or third Magnitude, between the Bear and Boots.

*Spica Virginis*, a Star of the first Mag. is a great many degrees below *Arcturus*, about two Degrees below the Ecliptick.

*Leo* is under the great Bear, and contains two Stars of the first Mag. one in the extream part of the Tail, the other in the Heart, placed in the Ecliptick.

*Cor Hydræ* is directly under *Cor Leonis*, about five or six Degrees below the Equator.

*Capella* is a Star of the first Mag. in *Stireus* in *Antiga*, a good way above the Bulls Eye.

*Libra* which follows *Virgo* hath three Stars of the second Mag. placed thus :

*Cor*

*Cor Scorpii*, a Star of the first Mag. follows *Libra*. There are three Stars of the first Mag. that are never seen in *England*. One in *Robur Carolinum*, another in the foot of the *Centaur*, and another in the Southern end of *Fluvius*.

*Orion* is a great many Degrees below *Hircus* about the Equinoctial. The great Star of first Mag. in *Orion*, is below the *Singulum*, and called *Rigel*.

*Lepus* is near below *Rigel* and the Stars, placed thus; ☉☉ of the third Mag.

*Canis Minor*, and *Canis Major* follow *Orion* the former is above the latter.

## COLLECT. IV.

*A Discourse of Bath, by Tho. Guidot. M. B.*

**A** *Ekalixar* Salt is common Salt, or Marine Salt; it is used indifferently by the Chymists, for the next Salt of any Vegetables by Calculation, &c.

That the *Bath-waters* tinge Silver yellow, is a cheat of the *Bath-Guides*, for that's done with a *Salino Sulphurous* Mud or Dung, such as is often found in Houses of Office, &c. 10.

The Waters are as medical and effectual in Winter as in Summer, See *Preface*.

The ways to gain a Sediment are four, *Evaporation*, *Insolation*, *Precipitation*, and *Distillation*. *Insolation* is a very laborious way: The Author resolved on the other three, see *Preface*.

Many Cures have been done by the Baths: Sir *Humphrey Loyd* soon recovered there of a *Sciatica*.

*John Rivel*, 1674. cured of an *Hemiplegia* or dead Palsie of one side in a Months bathing, *ib.*

The

The Waters dye and tinge the Guides Skins and Linnen, and the Stones in the bottom yellow, upon the Account of the *Ochre* the Waters abound with, 49.

Oaken Chips tinge better than Galls, 34.

The vertue of a Gallon of the Water may by extracting the Salt, be reduced to a pint for Potion, 47. The Waters of *St. Vincent's Rock* have not half the heat of the *cross Bath*, 99. These Waters of *St. Vincent's Rock*, are as good as *Tunbridge*, 124. *Castle-Cary-water* is more impregnated with Salt than the Waters of *Bath*; and therefore more medicinal and effectual in portion, 126, 127. This Water is nitrous à *prædominio*, having more Nitre than Salt, &c. Dr. *Jordan* says, The *Baths* are bituminous, à *prædominio*; but Dr. *Guidot* denies it, 109. The *Baths* are good against all Diseases that require cooling, cleansing, opening, evacuating, 116, 117. against Dropsie, &c.

The Salt extracted and dissolved in the Water, is to be used in Potion, 115.

As to heat, the *Cross-Bath* is most Temperate. The hot *Bath* was formerly the hottest, but now the *King's Bath* is so.

The heat of the Water is not the effect of a subterraneous Fire, but of a Fermentation arising from the acting of an Acid or an Alkalizat Salt, both which Salts are contained in the *Baths*, and much assisted by the vast quantity of impalpable Powder, the greatest ingredient in the Waters, 98.



## C O L L E C T. V.

*An Historical Explication of that Wonder of the World, The French King's House at Versailles; and in that of Monsieur at St. Cloud, 1684.*

**V***ersailles* eclipses all the enchanted Palaces of History and Fable. The *Bee* is the Symbol of Diligence; and so are the Silk-worms, which never rest from the time of their Birth, even to their Death.

The Crane is the Symbol of Vigilance.

The third wonder of *Versailles* is the great Marble Stair-case, which exceeds all that *Greece* and *Italy* ever had of wonderful, 27.

*Monseigneur le Brun*, first Painter to the King, equals, if not exceeds *Raphael* and *Michael Angelo*, 41. The Sun is the Hieroglyphick of the King.

In the *vivarium* are many kinds of Animals from Foreign Countries, *Ostriches*, white *Crows*, &c. 87.

In the Treasury of *St. Denis*, There is a little Vial, in which there is of the Blood and Water which ran from the side of our Saviour.

There is also some of the Milk, and of the Gown of our Lady, 116. A Finger of the Apostle *St. Thomas*. Also the Myrrh which the Kings offered to our Saviour. One of the Nails wherewith Christ was fastned to the Cross, &c.

One of the Pitchers at the Marriage in *Cana*.

An Arm-bone of *St. Simeon*.

The Image of *St. Hillary*, Bishop of *Poitiers*.

Some of the Bones of the Prophet *Esaïas*, who liv'd about 600 years before our Saviour, 123.

St. *Denis* the *Areopagite* is esteem'd the Apostle of *France*, and Patron of the Place.

There is also a curious Vessel of rich Chrystal, which was used in the Temple of *Solomon*, 135.

The Lanthorn of *Malchus*, which serv'd for the taking of our Saviour.

The Sword of *Jane de Arc*, the Maid of *Orleans*,  
And the Looking-glass of the Poet *Virgil*.

## COLLECT. VI.

*Dodona's Grove*, by James Howell, Esq;  
1645.

**T**Here's no Country without her Nick.

*France* is called a great *Bedlam*,  
*Italy*, a great *Bordel*,  
*Germany*, a huge *Brew House*,  
*Spain*, Nature's *Sweating-Tub*,  
*England*, a *Stage of Mymicks*,  
*Ireland*, a *Friperie of Bankrupts*.  
*Wales*, a *Conventicle of Hills*,  
*Scotland*, the *Urinal of the Planets*,  
*Holland*, the *Suburbs of Hell*.

Of all *Foreigners*, The *Italian* makes the best  
*Associate* for an *English-man*, 76.

A stout old *Spaniard* said, he fear'd no *Enemies*  
but his years.

Some *English* men that waited on Prince *Charles*  
in *Spain*, told in disparagement of *Spain*, even in  
the King's *Palace*, That if they had left an *Eye* be-  
hind them in *Spain*, they would not come thither  
again to fetch it. That they would never see it again,  
unless it were in a *Map*.

The

The Earl of *Pembroke's* Death was predicted by Astrology, 126.

The *French King's* Revenues are mounted to twenty Millions, 140.

King *James* for his Learning was called *England's* third University, 114.

The present *French King* was born three and twenty years after the Marriage of the King his Father, and the Queen his Mother.

The Parliamentary Power is now lost in *France*, and devolved to the King.

*Comines* is called the *French Tacitus*.

King *James*, when *Charles* went for *Spain*, told the Chaplains, to have a care of *Buckingham*, that he should not turn Papist; but as for *Charles*, he did not fear him, 19.

It was said of *Gustavius*, that the Soul of *Cæsar* had enter'd into him, 139.

*Gundamore* said, that *England's* Bran, that is, the Populacy, or vulgar People, was very coarse; but her Flower wondrous fine; for he was affronted by the vulgar, the Nobility he liked well.

## COLLECT. VII.

*The Sceptical Chymist, by the Honourable Robert Boyle, Esq; 1661.*

THE Liquor Alkahest is an universal *Menstruum* that will resolve all Bodies, even such as are irresoluble by vulgar Fires, into their component Principles, without any Residence or *Caput Mortuum*: *Paracelsus* and *Helmont* were Masters of this *Menstruum*, which sometimes (because of its great Analyzing Power) they called *Ignis Gehenna*, 216.

*Gasto Clavius* kept in a Furnace an Ounce of Gold in constant fusion for two Months, and when he took it out, it had not lost any thing of its weight, 56.

Gold, Silver, Mercury, *Venetian Talck*, *Muscovy* Glas, or pure and fusible Sand cannot by Fire, or any other *Menstruum*, be resolv'd or dissipated into the Hypostatical Principles, Salt Sulphur, &c. 61. But the Author says, he has found a *Menstruum* that will destroy Gold, and turn it into Silver.

In Distillations Salt and Spirit ascend before Oyl. Fire severs not the Earth and the Alkaly, that is, *Caput Mortuum*, though they be Heterogeneous Bodies, 87.

Fire cannot sepearate Silver and Gold colligated into a Mass, but *Aqua Fortis*, or *Aqua Regis* can, 90. Charcoal-fire is stronger than the Sea-coal, 92.

Cold does not always congregate *Homogenea's* and *Heterogenea's*, 93.

Wine, that is, *Sack*, will not freeze in our Climate, but in *Nova Zembla* it will, 97.

Second Causes can but modifie and alter, not create, 104. *Helmont's* Willow, and the Author's Squash grow mightily in bulk and weight by affusion of Water only. Hence *Helmont* makes Water the sole Element, and to contain virtually the Hypostatical Principles, 207, 213. Tobacco is an *Annual* Plant that arises where it prospers, as high as a tall Man, its Leave is above a foot and half broad.

Insipid Water ( according to *Van Helmont* ) is the first matter of all mixt Bodies.

*Sal circulatus Paracelsi*, that is, the Alkahest will adequately resolve Planes, Animals and Minerals into one Liquor or more, according to their internal disparities of parts; and their Liquors may by frequent Cohobations from Chalk, or other Idoneous matter, be depriv'd of their seminal Endowments, and return to their first simplicity, insipid Water, 116.

The

The Atomical Hypothesis commonly ascrib'd to *Leucippus* and his Disciple *Democritus*, is by Learned Men attributed to one *Moschus* a *Phenician*, 120.

Eels in distillation scarce afford any thing but Phlegm, 124. A Viper will survive its Head and Heart some days in a convenient Air. And Vipers like Eels seem to be but coagulated Phlegm. And even Man's blood abounds in Phlegm also, insomuch that out of seven Ounces and a half of pure Blood, there hath been drawn near six Ounces of Phlegm, 124.

Milk is supposed to be but blanch'd or alter'd Blood, 133.

Gold Coyn in our English Mints is generally alloy'd with the mixture of about a twelfth part of either Silver or Copper, or both, 151.

Gold and Silver being melted together, *Aqua fortis* will dissolve the Silver, and leave the Gold untouched, 153.

*Minium* is but Lead powder'd by the Fire.

The Chymical Principles are not Homogeneous, and have not the simplicity and purity that is requisite to Elements, 199, 283. Chymists in their Writings are very obscure and enigmatical: They use to say, *Ubi palam locuti sumus, ibi nihil diximus*, 202. Decomposed Bodies are such as consist of other compounded Bodies.

Volatile Salts are diaphoretick and depilative, 251. In some Northern Countries where Fir-trees and Pines abound, the poorer Inhabitants use long splinters of those resinous Woods to burn instead of Candles, 264.

The Mercury of Lead may be transmuted and fixt into perfect Gold, 275.

It is a doubt whether Mettals have any Salts at all, 276.

The Phlegm of Vitriol is a very effectual Remedy against Burns; and is a great *Arcanum* for dissolving the hard and obstinate Tumors, 280. Gold is the closest and compactest of Bodies, and so the most ponderous, 312.

It may well be doubted, That all *Terra damnata*, is not perfectly alike, or reduced to an Elementary Nature, 281.

Fire is not the true Analyzer of all Bodies, 287. Nor is it certain that the distinct Substances obtainable from a Concret by the Fire, were so pre-existent in it, that they were but extricated from each other by the *Analysis*, 288.

In the Mineral Kingdom scarce one Concrete is equally divisible into the five Principles, *Mercury*, *Salt*, *Sulphur*, *Water*, *Earth*, ib. *Caput Mortuum* is that which remains after Distillation, consisting of the fixt Salt, and *Terra Damnata*. Solidity in Bodies (say the Chymists) proceeds from Salt.

Glass is one of the most permanent and indissoluble Bodies in Nature, which yet is but made of bare Ashes brought to fusion by the violence of the Fire; and the Ashes consist but of Salt and simple Earth, 297.

The Writings of Chymists are obscure and like their Furnaces, afford smok as well as light.

Colour results from the superficial texture of Bodies, 328.

The Fire betters some things, and spoils others.

And *Helmont* affirms, There may be sometimes greater Vertue in a simple, such as Nature made it, then in any thing that can by the Fire be separated from it. *Credo*, says he, *simplicia in sua simplicitate esse sufficientia pro sanatione omnium morborum*, 338.

So *Nag. Barthias* says in his Comment upon *Beguinus*, *valde absurdum est ex omnibus rebus extracta facere salia quintas essentias*, &c. affirming that some things  
are

are better suited to our human Nature, when unprepar'd, then when they have past the Chymist Fire, as we may see in Pepper; of which some Grains swallowed do more towards the relief of a distemper'd Stomach, than a great quantity of the Oyl of the same Spice, 338.

The shining property of the Tails of *Gloe-worms* survive but a little time the Animals made conspicuous by it.

Amber has an Electrical faculty.

*Birch-water* is very medicinal, greatly commended by *Helmont*, frequently and profitably drank by the Author Mr. *Boyl*.

It is certain that Stones, Metals and Minerals are now adays generated, 356.

*Van Helmont* refers all things to their determinate Seeds, and seminal Principles; yet Mr. *Boyl*, though he allows of seminal Principles in Plants, Animals, Metals and Minerals; yet believe there are many Bodies, as Clouds, Rain, Hail, Snow, Ice, &c. that result not from seminal Principles, but from such contextures of the matter they are made of, as may be effected by Heat, Cold, artificial Mixtures, &c. 381.

To make a body fluid, there's nothing necessary, but that it be divided into parts small enough, and that these parts be put into such a motion among themselves, as to glide some this way, and some that way along each others surfaces, 386.

Salt *Armoniack* is made of gross undistill'd Sea-salt, united with the Salts of Urin and of Soot, which two are near of kin to each other, 387.

*Van Helmont* says, that fair Water, wherein a little Quicksilver has lain for some time, though it be insipid, has a power to destroy Worms in Human Bodies. And a Lady that had been eminent for her Beauty in divers Courts, confess'd to Mr. *Boyl*, that

this insipid Liquor was of all innocent Washes for the Face, the best that she ever met with.

*Boudeletius* says, his Wife kept a Fish in a Glass of Water, without any other Food, for three years; in which space it was so augmented, that it could not come out at the place at which it was put in; and at length was too big for the Glass, though of a large Capacity, 405.

Gold is so fixt, that 'twill retain its Nature, notwithstanding all that the Chymists by their Fires and corrosive Waters, are able to destroy it, 406. But Mr. *Boyl* Says, he has a *Menstruum* that will destroy even refined Gold, and bring it into a Metalline body of another Nature and Colour, 407.

Salt, Sulphur and Mercury seem to be new Compounds, produced by the Fire, altering the Texture of the concrete.

Glass in no other form, but triangular and prismatically figur'd, will afford those Colours as it does, 329.



## COLLECT. VIII.

*Religio Medici.*

**T**HE *Ave-Mary* Bell is a Church-bell, that tolls every day at six and twelve of the Clock, at the hearing whereof, every one, in what place soever, either of House or Street, betakes himself to his Prayers, which is commonly directed to the Virgin, 6.

*Plato's* year is a Revolution of certain 1000's of years, when all things should return unto their former Estate, and he be teaching again in his School, as when he deliver'd this Opinion, 13.

King *Phillip* said when his *Armado* was discomfited in—88. that he sent his Navy to fight with Men, and not to combat with the Winds.

The Grand Signior said of *Holland*, that if they should trouble him as they did the *Spaniard*, he would send his Men with Shovels and Pick-Axes, and throw it into the Sea, 39. It was the Ignorance of Man that miscalled the Providence of God by the Name of Fortune; 'tis not a ridiculous Devotion to say a Prayer before a game at Tables, for even in Sortilgies and matters of greatest uncertainty, there is a settled and pre-order'd course of Effects. It is we that are blind, not Fortune, 40.

We have no cause to quarrel with Nature, for leaving us naked, or to envy the Horns, Hoofs, Skins and Furrs of other Creatures, being provided with Reason, that can supply 'em all, 42.

Tho' I've Christen'd Effects by their sensible and nearest causes, yet is God the true and infallible cause of all, 43. As Reason is a Rebel unto Faith, so is Passion unto Reason.

The

The sturdy doubts and objections obvious in Divinity, the Author conquer'd not in a martial posture, but on his Knees, 45.

That Doctrine of *Epicurus* that deny'd the Providence of God, was no Atheism, but a magnificent and high strained conceit of his Majesty, which he deemed too sublime to mind the trivial Actions of those inferior Creatures, 47.

*Regiomontanus* his flying Gnat and flying Eagle were not unworthy of Admiration.

That Secretary of Hell that writ of the three Impostors, *Moses*, *Christ* and *Mahomet*, was *Ochinus*; and the Emperor *Frederick* the Second, was as Profane as he, and called them so too. *Galen* made doubt of the Immortality of the Soul, and so did *Seneca*, who said, *post mortem nihil est, ipsaque Mors nihil. Toti morimur, nullaue pars manet nostri*, 49.

*Garagantua* and *Bevis* abound with Stories and incredible things. *America*, when it was discover'd, had no such Creature as a Horse in it.

It is not unquestionable, that *Methusalem* was the longest liv'd of all the Children of *Adam*; or that *Judas* hang'd himself, 54.

The Author thinks the World hath too many Books, and could with Patience behold the Urn and Ashes of the *Vatican*, could he recover the perished Leaves of *Solomon*, &c. 58.

Some Men have writ more then others have spoken.

*Pineda* quotes more Authors in one Work, then are necessary in the whole World.

*Paracelsus* delivers a way to make a Man without conjunction.

The Author holds that the rational Soul is transfus'd in the Seed of the Parents, and proves it from the monstrous productions in the Copulation of a Man with a Beast, 83. If the Soul be not transmitted, why  
are

are not those Productions meerly Beasts, but have also an impressiion and tincture of Reason in as high a measure as it can evidence it self in those improper Organs. All flesh is grass, for all those Animals we behold, are but the Herbs of the Field, digested into Flesh in them, or more remotely carnify'd in our selves. Nay, we are all *Anthropophagi*, devourers not only of Men, but of our selves ; for all this Mass of Flesh about us, came in at our Mouths, and hath been upon our Trenchers, 85.

Some quarrel with their *Constitutions* for being sick, but if they understood upon what tender filaments that Fabrick hangs, they would rather wonder they are not always so, 99.

We should often revolve the *quatuor novissima*, those four inevitable points of us all, Death, Judgment, Heaven and Hell.

Some believe there went not a minute to the Worlds *Creation*, nor shall there go to its *Destruction*. Cain was not the first Murtherer, but *Adam* who brought in Death, 147.

### *Annotations upon Religio Medici.*

In the time of Pope *Paul* the Fifth, the Republick of *Venice* cast out all the Jesuits, and never received them into the State again, 195.

To make an Heretick, there must be not only, *Error in Intellectu*, but *pertinacia in voluntate*.

Pope *Leo* the Tenth, did too much resemble *Ochinus*, that Secretary of Hell, when he said, *quantas nobis Divitias comparavit ista de Christo Fabula*.

*Adam* is supposed to be without a Navel, 289. the Navel being only of use to attract the Aliment in *Utero Materno*, and *Adam* having no Mother, he had no use of a Navil.

Sir *Kenelm Digby* affirms that Light is not a Quality, but a solid Substance and Body.

He mightily commends Mr. *White's* Book, *de Mundo*, 311.

It is a merry Question in *Pantagruel's* Library—*Utrum Chimara in vacuo bombinans possit comedere secundas Intentiones*, 321.

---

COLLECT.

---

## C O L L E C T. IX.

*Medicina Statica; or, Rules of Health, by Santorius, Professor of Physick at Padua, 1676.*

**B**Y the weighing Chair, one may know what quantity he perspires every day; and the standard proportion of Aliment for his Body.

Insensible Perspiration is made either by the Pores of the Body, which is transpirable in all its parts, and is inclos'd in the Skin as it were in a Net, or by the Mouth, which alone in one day commonly amounts to about half a pound, for that may be discover'd by the dewey drops upon a Looking glass, if it be set close to the Mouth; and this latter is called Respiration, 3.

That weight, which to any one is such, as that when he goes up some steep place, he feels himself lighter then he is wont, is the exact standard of good Health.

Liquid Excrements are more ponderous then the thick. A Cup of Wine or Ale is of equivalent weight to a piece of Bread, though above thrice as big as it is in bulck, 70.

Cold obstructs Perspiration, and so does Physick, much fasting, 20. One is lighter in the Morning by three pound, then he was when he went to bed. In the space of one Night, there are commonly evacuated of Urin sixteen Ounces; of Excrements by Stool four Ounces, and by occult Perspiration forty Ounces, 20.

Many in the space of twenty four hours evacuate by Perspiration as much as they do by Stool in fifteen days.

Intermissi.

Intermission of Exercise obstructs Perspiration.

The grosser perspirable matter breeds Lice, &c. 27.

Animated flesh does not putrifie, because it is daily renew'd. Old Men prolong their Lives by frequent spittings.

Venery, much Exercise, much Drinking, and Suppers, shorten the Lives of old Men, 31.

While the Knees are kept warm, the Feet are not chill'd. Kind bathing promotes Perspiration.

The best Antidote against the Plague, is flying from it, 48. Dry weather is more healthy then rainy.

Temperate Bodies in Summer are less ponderous then in Winter, by about three pounds.

Mutton and Turneps are of easie Digestion, and Perspire freely, 75.

Wind in the Body is but a kind of imperfect perspirable water, 76.

Swines flesh doth not perspire well, nor suffer other Meat that's eaten with it to do so. That's the most healthful proportion of Meat, when after eating, the Body performs what it has to do with the same Agility, as if it were fasting.

Various dishes are not good, for they cause an excess of Eating, and the Concoction and Perspiration is less.

In a Man of moderate Dyet, the nocturnal Perspiration sometimes amounts to three pound.

No Remedy like this. Insensible Perspiration is an Excrement of the third Concoction, 98.

Dry Food, as Biskets, is good for Phlegmatick Constitutions. Sleep promotes Perspiration, and one a sleep perspires twice as much as one awake.

By change of Lodging sleep is disturb'd, and the Perspiration is less; for unwonted things, though better, are prejudicial to Body and Mind, 114.

Upon account of Perspiration, not only the sick lying with the sound, but also the sound among themselves, do mutually communicate their good or evil Dispositions, 125.

Riding doth agitate the Body more above the waste then below. The Amble is the most wholsom pace. Immoderate Labor hardens the Fibres, whence follows old Age.

The Vital faculty is diffus'd into the Arteries, and the Animal into the Nerves by Rays, and not by Spirits. Living bodies are lighter then the dead, and after Coition the Body weighs less.

Butchers, Fishmongers, and such as deal in Swine, when others sell the living, make a deduction of ten pounds in the 100, 175.

The Spirits are not more tenuous then Air, they are made of the Blood and Air, the Air passes through the whole Body, but the Spirits are inclos'd in Vessels, 178.

By Staticks and Ponderation 'tis found certainly true, that in the space of one Night, the Body weighs less by three pound.

---

COLLECT.

## COLLECT. X.

*Astronomy's Advancement: or, a Treatise of Telescopes, done out of French, by Jos. Walker, 1684.*

**T**elescopes are now made to twenty, forty and eighty foot long. All the Planets and Stars, excepting the Sun, are opaque Bodies. All the Planets besides the Sun, change their Faces like the Moon, 2. In the *Pleiades*, in a Circle of one degree of the Diametre, the Telescope discovers forty six Stars, whereas we can see but six.

In former Ages there were seven Stars observ'd in the *Pleiades*. The Sun hath sometimes been so darkened with spots, that many Stars have been seen at Noon-day, 9. It hapned to be so when *Cæsar* was murder'd, and it continued for a whole year, that it could scarce ripen the Fruits of the Earth, *Virgil Geor. lib. 1. Ovid. Metam. lib. 15.*

Many new Stars have appear'd and vanished, 23.

An *Italian Mile* is a 1000 Geometrical Passes. A Geometrical Pass contains five foot. The Diameter of the Earth is about 8000 such Passes. There's no certainty touching the distances of the fixed Stars, nor their magnitude. Of all mundane Bodies, some think the Sun the biggest, 44.

If the Sun moves round the Earth in twenty four Hours, its motion must be 100 times more rapid then that of a Bullet out of any Gun; and according to the *Ptolemaic Hypothesis*, it must move in one Minute 13095 English Miles, 48. But the fixed most vastly more. And this a considering Man will find it difficult to believe, that any Motion can be rapid.

The



The Parallax of the Moon is very sensible, its Horizontal Parallax is above a whole Degree. *Ergo*, the distance of the Moon may be more certainly concluded upon. In the other Stars, the Result exceeds not Probability, 52.

The Telescope in due position, is a violent burning-Glass; and a Man may take such a look in an instant, as never to see more with that Eye.

To prevent Hurt, take a piece of red or purple Glass, and interpose it between your Eye and the Glass of the Telescope, 50.

## COLLECT. XI.

### *The Memoirs of Phillip de Comines Lord of Argenton, &c.*

**H**E was acquainted with all the Princes of his time, in *Brittain, Flanders, Germany, England, Spain, Portugal, Italy*, and others, yet he saith, of all the Princes he ever knew, his Master *Lewis* the 11th of *France*, was least faulty in the main. *Preface.*

*Phillippinus* a *Flemming*, of a Great Family, had a plentiful Fortune, his Memory prodigious, wou'd dictate at the same time, to four several *Clarks*, several things, with the same ease, as if there had been but one.

He lamented his want of *Latin*. He spoke *Dutch, Spanish, Italian*, very well, but best of all *French*. He was in great esteem with *Lewis* the 11th.

*John Sleidan* was a *German* Writer, and Translated these Memoirs into *Latin*.

*Cicero commends Caesar's Commentaries.*

The Author says, the best things in the World in Battel, are the Archers, 17.

A Pail of Wine, will mightily refresh an old and a wearied Horse, 26.

No Man more Industrious, nor Couragious, than Count *Charrloys*, 27.

King *Edward* the 4<sup>th</sup>, caused his Brother the Duke of *Clarence*, to be drown'd in a Pipe of *Malmesy*, 38. In the Wars of *Tork* and *Lancaster*, there Dyed 80 Persons of the Blood-Royal in *England*, 39.

*Paris* is encompass'd with the best and fruitfulest Country, that ever the Author saw, 42.

The Princes in *France*, are brought up to nothing but an idle kind of Vanity, both in their Clothes and Discourse, they have no Knowledge in Letters, &c. See the Conference between the *French King* and Count *Charrloys*, 56.

*Normandy* is a great Dutchy, and almost a third part of the Kingdom of *France*.

One had better serve a Wise, than a Weak Prince.

It is better to be Wise at last, or late, than to be perpetually Foolish, 70. Counsel given after *Dinner*, is not alwaies the best, 78.

*Liege* and *Gaunt* are the most fickle Towns in the World. The Interviews of Kings or Great Prince, are seldom good, 104. The Wine was frozen at *Liege*, and 'twas cut with Hatchets. Mens Fingers dropt off, because of Cold.

*Calais* was the Chiefest Jewel belonging to the Crown of *England*, and the best Government in the World, or at least in *Christendome*, worth more than 15000 Crowns per Annum, 151.

King *Edward* was the Handsomest Prince, that *Comines* ever saw with his Eyes, 153, 237.

A Prince, if he be not Prudent, Personable and Courteous, the less he is seen, the better it is for him, 170. How Embassadors are to be receiv'd, &c. There's no Court without some *Male-Contents*, *ibid.*

In all the Treaties between the *French* and the *English*, the *French* alwaies outwitted them, 171.

The Duke of *Burgundy* wish'd, that *France* had not one, but six Kings, 174.

*Comines* never in his whole Life, knew any Man so wise in Distress, as *Lewis* the 11th, 194.

A Prince his Ministers, or Great Servants, shou'd behave themselves so, as that the Prince might Love them and not Fear them, *ibid.* To have served too well, has often proved the Destruction of the Agent, *ibid.* Because, that often elates the Spirit too much, and this again effects their Ruin.

*Adolph* Duke of *Guelders*, his execrable Fact and Inhumanity to his Father, 196. He carry'd his Father Prisoner five *Dutch* Leagues on Foot, bare-foot in a Cold Night, and put him in a dark Dungeon. The Aged Father threw him his Glove, and demand'd Combat, &c. 197.

The Story of the Bear, 209. The distance between *Dover* and *Calais*, is 7 Leagues.

The Author thinks, there's no Countrey in the World better seated than *France*, it is neither too hot nor too cold, 219. Of the *French* King's Herald, 220.

The King of *France* his civil Treat of the *English* at *Amiens*, 231. The Interview of the King of *England*, and the King of *France*, 236.

Not to have Travell'd and been Abroad, is doubtless a great defect in a Gentleman. To see the World and Transactions therein, gives Wisdom and Magnanimity. Some are too uxorious, or fond

of their Children, or Estates; either of which, has been the Ruine of many a Brave Man, 243.

At length, all the Princes of *France* were influenc'd by the King, and sail'd all by his wind, save the Duke of *Burgundy*, 259. In the Battel against the *Swissers*, the Duke of *Burgundy* lost his Honour and his Wealth in one day, 261. The King *John* of *France*, was taken by the *English* at the Battel of *Poitiers*, after he had made a Brave and Valiant Defence, *ibid*.

The Defeat of the Duke fill'd him with Melancholly and disquiet, 268. It lay so heavy on his Spirits, that it threw him into a dangerous Indisposition, especially his second overthrow at *Morut*, 275. After that Defeat, he wou'd not cut his Beard, 'till the Arch-Bishop of *Vienna* perswaded him to do it, 275.

It is better for a Prince to Defend what is left, than to Meditate Revenge for what is lost, 277.

The *English* disparag'd, *ibid*.

The Ruine of the Duke of *Burgundy*, may well be thought to be the effect of his Infidelity to the Count *de St. Paul*, Constable of *France*, 281.

For he had promis'd the Count safe Conduct, and yet he seiz'd him, deliver'd him to the King of *France* to be Executed. A Good Prince shou'd never falsifie his Faith, or be guilty of such pernicious Fraud and Collusion, &c. 282.

The *Comte de Campobache* his Plots against the Duke of *Burgundy* his Master, 283.

The Duke of *Lorrain*, fought the Duke of *Burgundy* near *Nancy*. Slew him and Routed his Army, 289. Of the Duke of *Burgundy's* Vertues, and the Splendor of his House, see 291.

He was never Cruel all his Life, 'till a little before his Death, which was a sign his own Life too wou'd not be long, *ibid*. He was very splendid in his

his Clothes, his *Courage* as great as any Man's in his Time, 292.

Posts were settled in *France*, in King *Lewis* the 11th's Time, about the Year, 1470.

Wise People will so moderate their Language in Prosperity, that in time of Adversity they need not be constrain'd to change it, 299.

The King of *France* rejoyceth at the Misfortune of the Duke of *Burgundy*. 300.

It was the Custom of *Lewis* the 11th, to have seven or eight, sometimes more, alwaies to Dine with him, &c. 302.

*Holland*, *Brabant*, *Namur*, *Hainault*, &c. did all belong to the Duke of *Burgundy*, 303.

There's no Man so Wise, but he must sometimes mistake, and if he Lives long, many times; so it has been, and will be perpetually, 304.

The *French* King sent *Oliver* his Barber, an Express to *Mademoiselle de Bourgon* in *Gaunt*, where he was slighted, and hardly escaped alive, 307.

No Body can lose; but some Body must gain.

The *Seigneur de Hymbercourt*, and the Chancellor *Hugonot*, were put to Death by the *Gaunlois*, against the Will of their Princess, 321.

All the Mischiefs, Injuries, and Oppressions in the World, proceed from want of Faith, &c. 338.

And the greatest mischiefs are wrought by the greatest Powers; as Kings, Princes, 337.

To raise Money from Subjects without their consent, is downright Tyranny, *Ibid*.

When King *John* of *France* was taken Prisoner by *Edward* Prince of *Wales*, at the Battel of *Poitiers*, the said King *John* paid 3 Millions of Franks, and gave the third part of his Kingdom besides for his Ransome; which so impoverish'd the Kingdom, that for a long time their Money was of Leather, with a Nail only of Silver in the midst of it.

The Earl of *Richmond* told *Comines* a little before he came over to Fight *Richard* the Third, that from the time he was five years old, he had been always either a Fugitive, or a Prisoner; he was 15 years Prisoner in *Brittanie*, 343.

King *Lewis* the Eleventh of *France*, exceeded King *Edward* of *England* in Policy, yet *Edward* was a brave Prince, had got Eight or Nine Battels in *England*, was present in all himself, and fought still on Foot, which was very Honourable, 349.

The *English* have continued in Possession of *Normandy*, and *Guyenne*, for the space of 350 years, 350. King *Lewis* aforesaid, paid 50000 Crowns yearly to King *Edward* of *England*, as Pension, or Tribute, *Ibid.* He gave great Pensions also to the *English* Courtiers, *Ibid.*

He paid his Pensions to all Foreign Lords, always in Gold, 352.

When the King wou'd have had the Dutcheſs of *Burgundy*, who was of Age, and capable of bearing a Child, to Marry the *Dauphine*, who was but Nine year old, one of her Ladies ſaid, *The Dutcheſs had more need of a Man, than a Boy*, 357. She Married *Maximillian* Duke of *Austria*. The *Germans* are extream parcimonious, rude in their Conversation, and live naſtily, 360.

Women, by a particular Law in *France*, are precluded, and cannot inherit the Crown, which prevents its falling into the hands of a Foreign Prince, *Ibid.* The young Princeſs of *Burgundy* died of a fall from her Horſe, being unhappily ſet upon a hot headed Jade.

*Lewis* the Eleventh was much againſt Delays, and Protraction in Proceſſes of Law, 374. He more oppreſſed his People, than any of his Predeceſſors, 375.

A Distemper seiz'd the King, that depriv'd him of Speech, and Senses, 376. The Kings of *France* touch Weekly for the King's-Evil, 377.

King *Charles*, the Father of the said *Lewis*, in his last Sickness, took a fancy those about him wou'd Poison him, to make way for his Son ; the impression went so deep, that he refused his Victuals, and at length it was concluded he shou'd be forc'd, and so was forced down his Throat, after which violent he died, 378.

*Charles* the Seventh was the first that gain'd that Point, of laying Taxes upon the Countrey at his pleasure, without the Consent of the Estates of the Kingdom, 382.

Of the Hermit, or Holy Man of *Calabria*, 384.

In *Barbary* there are a sort of Lions no bigger than Foxes, 386. *Lewis* his last Fit, and Death, 395. In all his Sickness, he was never the Man that Complained, which most People do, when they are ill, 396.

He gave Dr. *Cottier* his Physitian 10000 Crowns every Month. No Man was more afraid of Dying than he, 398. All his Life long, he had Commanded his Servants never to mention, in his hearing, that Cruel word Death.

*Cottier* his Physitian treats him very rudely, 401. *Comines* in Prison 8 Months, *Ibid.* He made Iron Prisons, the first that Invented 'em was the Bishop of *Verdun*, and he was the first that hansom'd them, being Committed to one of 'em for 14 years, 401. He desired to die on a *Saturday*, of all days, and so he did, 404. He loved Hunting, and Hawking, 405. He liv'd 61 years, yet he had a fancy he shou'd not out-live 60, because since *Charles Le-Grand* no King of *France*, liv'd beyond that Age, 408.

It is the Custom of the World to adore him whose Authority will be Greater, rather than him

whose Authority is at the heighth, and will never be higher; that is, Men always Court the Rising Sun. So did the *Gaulois* Count *Charles*, in the Life of his Father *D. Phillip* of *Burgundy*, *Ibid.*

*Mahomet Ottoman*, at the Age of 23, took *Constantinople* by Assault; and the Christian Emperour was slain at the Breach; this was his first Exploit. Afterwards he Conquer'd two Empires, that is, the Empire of *Constantinople*, and *Trebizond*, four Kingdoms, *Bosnia*, *Syria*, *Armenia*, and *Moravia*, and 200 Cities, &c. 413.

The *Venetians* Affairs are managed with better Counsel than any Princes, or States in the World, 434.

The *Italians* are the most Jealous, and Covetous People in the World. *Alphonso* King of *Naples*, and his Father *Ferrand* were as Wicked as any the Sun ever saw, 465.

When *Charles* the Eighth went through *Italy*, to Conquer *Naples*, not any one place gave him the impediment of a day, save the Castle of *Naples*, which made Pope *Alexander* the Sixth say, That the French came into *Naples* with wooden Spurs, and only Chalk in their Harbingers Hands, to mark out their Lodgings, 465. No Man that was Cruel, was ever known to be Courageous; witness *Alphonso* of *Naples*, *Nero*, &c. 467.

When *Charles* entred *Rome*, 15 Fathoms of the Wall of the City fell down, and the day after, 15 Fathoms of the Castle Wall fell also.

At *Venice*, they make all their Visits by Gondolas, or Boats; at *Milan*, on Horseback, 478.

In *Venice* they have near 30000 Boats, but they are small, 479. The middle is the most Honorable Place among the *Italians*, *Ibid.* *Venice* described, *Ibid.* It is the most Glorious, that *Comines* ever saw.

The



The *Italian* Embassadors go in Gowns, 490.

Friar *Jerom* in *Florens*, did foretell many things that since came to pass; as, the Reformation of the Church, the coming of the *French King* into *Italy*, &c. 500. The *Appenine* Mountains in *Italy*, are the greatest *Comines* ever saw, 510.

The *Estradiols* of *Venice* are of the same Nature with the *Fanizaries* in *Turkey*, 511.

The Plain of *Lumbardy* is the pleasantest, and fruitfullest in the World, 514.

The King rode upon a Horse with one Eye, but the best *Comines* ever saw, 518.

The King in the heat of the Battel was making Knights, 522. No Man is exempt from Adversity, even Princes, and Great Persons meet with Great Troubles, and Disquiets, which shorten their lives, scarce any King of *France* (since the time of *Charles-main*) ever liv'd to be 60 year old. Upon the bare suspicion King *Lewis* 11 being near that Age, had much inward disquiet, and concluded himself gone. His Father *Charles* the 7th, took Conceit his Servants wou'd Poison him, and refused his Meat, &c. 578. The Pay of a Man at Arms (and they are well paid) is a 100 Ducats a year, 587.

No mutation of State happens, but some People are the better for it; yet when a Prince dies unexpectedly, the first news is terrible to all, 602. That Kingdom is most Happy, whose King fears God, and regards his own business.

Princes are as subject to Discomforts, and Perplexities as other Men. The Troubles which God lays upon Princes, are heavier, and more durable, than what he inflicts upon inferiour People, 601. The Revenue of the Crown of *France* (in *Comines* his time (comprehending his Duties, and Customs) came to above a Million a year, 604. The last expression that *Charles* the 8th used, whilst he was in health,

health, was, that he hoped never to commit Mortal Sin again, nor Venial, if he cou'd help it; and with those words in his Mouth he fell backwards, and lost his Speech, and about Nine hours after, he died, 605. He died in a nasty place, looking upon Gamesters playing at Ball. It is plain, a Prince has his Fate, as well as a Peasant.

---

## COLLECT. XII

### *Some Adversaria out of Gassendus.*

**C**ircles of Declination are drawn through the Poles of the World, and cut the Equator in right Angles. Hence the Declination of a Star, or other Point, is nothing else but the Arch of one of those Circles, which is intercepted between the Equator, and such a Star, or Point.

It is either Northern, or Southern, according as the Star or Point is either to the North, or South of the Equator.

The right Ascension of a Star is the Arch of the Equator, which is intercepted from the beginning of *Aries*, unto that Degree or Point wherein the Circle of Declination doth cut the Equator. For as much as that Degree, or Point of the Equator doth rise, and ascend together with the said Star in a right Horizon, or right Position of Sphere.

Where the Horizon, or Position of Sphere is oblique, there the ascension is also oblique; for the same Degree or Point of the Equator doth not rise together with the said Star, but another Degree of the Equator, either before, or after it. And the Arch of the Equator intercepted between those two Degrees, or Points, is call'd the *Ascensional Difference*. p 28, 29.

Circles

Circles of Latitude are those that pass through the Poles of the Ecliptick, and cut it in right Angles. And since the Latitude of a Star is computed from the Ecliptick, 'tis evident the Latitude is nothing else but the Arch of one of those Circles, which is intercepted between the Ecliptick, and the designed Star.

The Latitude also is either Northern, or Southern, as the Star stands of the North or South side of the Ecliptick.

*Lastly*, The Longitude of a Star, is the Arch of the Ecliptick, which is intercepted from the beginning of *Aries*, unto that Point or Degree wherein the Circle of the Latitude doth cut the Ecliptick.

Hence it follows, that when the Sun or Star is in the Equator, it hath no Declination, and what is in the Ecliptick, hath no Latitude, 30.

That Horizon, or Sphere is said to be right, when both the Poles lie upon the Horizon, and the Stars in their Rising and Setting make right Angles at the Horizon.

The Sphere is said to be oblique, when one of the Poles is elevated above the Horizon, the other depressed below it, and the Stars in their Rising and Setting, cut the Horizon obliquely.

The Sphere is called Parallel, when one Point is put in the *Zenith*, the other in the *Nadyr*; and the Stars neither Rise nor Set, and move Parallel to the Horizon, except the Planets which move through the Zodiack; whereof one half being elevated above the Horizon, the other always depressed, the Planets become Conspicuous in one half of the Zodiack, and Inconspicuous in the other.

They live in a right Sphere, that are directly under the Equator; in a Parallel Sphere, that are directly under the Pole; and they live in an oblique, which are in intermediate Places between the Equator, and either Pole.

In a Right Sphere there's a perpetual Equinox, Days and Nights 12 hours long. In a Parallel Sphere, Six Months Day, and Six Months Night. In the Oblique, the Days and Nights are unequal.

117. 147.

*John Frederick Helvetius*, Dr. of *Medicine*, in the year 1666, at the *Hague*, transmuted an entire substance of Lead in a moment into Gold *Obrizon*, with a very little particle of the true Philosophers Stone. See his Books, Intituled *The Golden Calf*.

Friar *Jerom* a *Florentine*, inveigh'd against the Corruptions of the Church of *Rome*, and was Burnt at *Florence*, by the means of the Pope, and others, 606.

*Charles* the Eighth died of an Apoplexy, he had 4 Physicians about him, but his greatest Confidence was in the greatest Fool, and the other 3 durst not speak their Judgments. They saw the Indications of Death, and wou'd have Purg'd him some days before. 609.

He was the most affable Prince in the World, and hardly ever said that word to any Man, that cou'd in Reason displease him. *Comines* thought himself the only Person in the World he was unkind to; but knowing it was in his youth, and not at all his own doing, *Comines* cou'd not resent it, 610.

*Pharamond* was the first that was Elected King of *France*; before his time they were called Dukes, or Kings of *Gaul*. The said *Pharamond* was Chosen King in the year 420. But some begin the Genealogy of the Kings of *France* at *Merovis*, who was made King in the year 448.

## COLLECT. XIII.

Anglorum Speculum, or the Worthies of England. London, 1684.

**T**Hreatned Folks live long ; yea threatned *Elijah* never Dyed. *Cardinals* anciently were no more than Curates made by Bishops, as well as Popes. Cardinals are of three sorts, 1<sup>st</sup>. Cardinal Bishops, whereof there are 7. Cardinal Priests, 28. Cardinal Deacons, 16. Their Habit is Scarlet. pag. 5.

The Lord Keeper is in effect, the same with the Lord Chancellor ; save that some will have the Lord Chancellor's Place *ad Terminum Vitæ*, and the Lord Keeper's, *ad Placitum Regis*, 8.

The Principal Secretary of State is for Foreign Business, the Secretary of State is for Domestick Business, *Ibid*.

The Schoolmen reduce Corporal Charity to Seven Heads, Visito, Poto, Cibo, Redimo, Tego, Colligo, Condo, 13.

England is call'd the Ringing Island, for its tunable Bells.

It is an *English* Proverb,

*When the Sand feeds the Clay,  
England cries well-a-day :  
But when the Clay feeds the Sand,  
It is merry with England.*

That is, a dry Season is more beneficial to the *English* Soil, than a wet.

The Sandy ground being about a fifth part of the *English* Soil, the Clay about 4 fifths, 35.

*He that England wou'd win,  
Must with Ireland first begin.*

Arch-Bishop *Laud* was of *Barkshire*, he might have been a Cardinal, but refus'd it, 43.

Some Papiſts ſay, that many that were burnt in Queen *Mary's* days, drank Sack in Queen *Elizabeth's* days, *Ibid.*

*Tho. Cole* of *Reading* a Clothier, had 140 Menial Servants, beſides 300 Poor People imploy'd. His Wains ſtopp'd *Henry* the Firſt in the High-way; the King gratify'd his Induſtry with a Standard-yard, the length of his Royal Arm, 51.

*Verſtegan* will have the Name *Howard* to be Holdward, that is, Keeper of a Caſtle, or Truſt, 54.

The Diſeaſe of the Stone is call'd *Flagellum Studioſorum*, 64.

Mr. *William Oughtred* is term'd the Prince of Mathematicians in our Age and Nation, *Obit* 1660. 78. *Mathew Paris* inveighs againſt the Pope, 97.

Sir *Tho. Egerton* Lord Chancellor, was wont to ſay, Froſt and Fraud, end in Foul, 104.

Sir *Hen. Middleton* ſays, he ſaw Ice at *Zenan* in *Arabia*, tho' but 15 Degrees North Latitude, 115. Apothecaries hold Amber-Greeſe at 5 Pound an Ounce.

*By Tee, Poll, and Pen,  
You ſhall know the Corniſh Men,* 121.

*William Noy* verify'd his Anagram. *I Moyl in Law.*

*Plinillimon-Hill* in *Wales*, is the Monarch of all Mountains South of Scotland, 133.

Queen *Elizabeth* was wont to ſay of the Gentry of *Devonſhire*, that they were all born Courtiers, with a becoming Confidence, 148.

Bishop

Bishop *Jewel* was of that County. Of him may be said, *Nomen, Omen, Jewel* was his Name, and Precious his Vertues, 153.

*George Monk Duke of Albemarl* was of the same County also; so *Drake, Rawleigh, Hooker, &c.* The Author was Chaplain to the Princess *Henrietta*, since Marry'd to the Duke of *Orleans*, 168.

*Venerable Bede* was Born in *Durham*, 179. *John Wickliffe* was a *Durham* Man also.

The Bishop of *Durham* is Sheriff Paramount in his County, his Deputy never Accounts in the Exchequer, but makes up his Audit to the Bishop, 184.

The best Oysters in *England* are bred near *Colchester* in *Essex*, Ibid. *Audley-End*, Built by *Thomas Howard Earl of Suffolk*, is the best Subjects House in the Island. *New-Hall*, now the Duke of *Buckingham's*, surpasses for the pleasant approach and the adjoining Parks, 185.

#### PROVERBS.

*Essex* Miles, that is, very long Miles.

*Essex* Calves, the Fairest and Finest in *England*, 186.

The Family of the *Vere's* Motto was, *Vero nihil Verius*, 194.

*Dr. William Gilbert* Physician to Queen *Elizabeth*, born in *Colchester*, is Famous for his incomparable Book, *De Magnete*, Ibid.

*Fran. Quarles* Esquire, was Secretary to Bishop *Usher*, and an Excellent Poet, died, 1643.

*Joseph Mede* was Born in *Essex*, and was a *Millenary*. In *Gloucester Meadows*, a Wand laid along over Night, cannot be seen next Morning, &c. 202.

*Alex. of Hales*, born in this County, was the first that wrote a Comment on the Sentences; he had the Title of *Dr. Irrefragabilis*, died, 1245. in *Paris*.

Sir *William Hampton*, Lord Mayor of *London*, 1472, was the first that set up Stocks in every Ward.

*Hant*

*Hant-shire* PROVERBS.

Manners make a Man, quoth *Will. Wickham*.

*Canterbury* is the higher Rack, but *VVinchester* is the better Manger.

*Will. Wickham* was Son to Sir *John Perrot*, 216.

*Will. Lillie* Born in *Hant-shire*, Master of *St. Paul's-School*, wrote a Latine Grammar, Revised by *Erasmus*, Flourished *An. 1522. 220.*

*Hertfordshire* is the Garden of *England* for Delight, 369.

*Herefordshire* exceeds in 4 *W's*, Wood, Wheat, Wooll, and Water.

Serjeant *Hoskins* Entertain'd King *James* with a *Morish* Dance of 10 Aged People, all of them making more than 1000 years, 377.

## PROVERBS.

Blessed is the Eye, that is betwixt *Severne*, and *Wye*. *Lemster* Bread, and *Webley* Ale, *Viz.* The best. This County, saith *Cambden*, is not content to be accounted the 2d in *England*.

*Cambden*, and *Selden*, Great Antiquaries, owe their Glory to Sir *Rob. Cotton's* Library at *Westminster*, 398.

*Kent*. The Natural Commodities here, are *Cherries*; first Planted here by *Henry 8.* *Saintfoine*, a great Fertilizer of Barren Ground, 393.

## PROVERBS.

*A Knight of Cales, a Gent. of Wales,*  
*And a Lord of the North Countrey:*

*A Yeoman of Kent, with his yearly Rent,*  
*Will buy 'em out all Three.*

2. *Dover-Court*, all Speakers, and no Hearers.

*Jo.*



*Jo. Kemp* was Born in *Kent*, of him 'tis said,

*Bis Primas, ter Præsul erat, bis Cardine functus,  
Et dixit Legem, bis Cancellarius Anglis.*

*Dr. Will. Harvey*, that found out the Circulation of the Blood, was bred in *Caius College* in *Cambr.* Physician to *Charles the First*, 411.

*Stephen Langton*, Arch-Bishop of *Canterbury*, first divided the Bible into Chapters, and *Rob. Stephens* a Frenchman subdivided into Verses, 421.

*Jo. Doe* Dr. was a great Mathematician, and well Skill'd in Natural Magick, 431.

*Joseph Hall*, Dr. was call'd the English *Seneca*, for his pure, plain, and full Stile.

The Bishopricks of *Ely*, *Peterborough*, and *Oxford*, were Carved out of *Lincoln*, 451.

The Cathedral of *Lincoln* is a brave Structure.

It was a Wag that said upon the Report of the Imprisonment of Pope *Urban 8.* Now it is true, *Papa non potest errare*, 455.

Sir *William Skipwith* wou'd not comply with his Fellow Judges in the Reign of *Richard 2.* That the King by his own Power might rescind an Act of Parliament.

The Collar of *S. S. S. Effes*, is taken from *St. Sim. Simplicius*, an uncorrupt Judge in the Primitive Times, 460.

Sir *Jervase Scroop* Knight, receiv'd in *Edge-Hill* Fight 26 Wounds, and was left among the Dead, and yet reviv'd the next Morning, &c. 468.

*Hampton-Court* was Built by Cardinal *Wolsey*, and bestowed by him on *Henry 8.*

*Tyburn* is so call'd, from *Tye*, and *Burn*, &c. 471. *William Gouge* read 15 Chapters every day, 475. Sir *Julius Cæsar* Knight, was Eminent for Charity, 475.

The *Exchange* was Built by Sir *Tho. Gresham* Knt. in imitation of that at *Antwerp*, 479.

The *Tower* was first Founded by *William* the Conquerour. Worsted Stockins were first made in *England*, An. 1564. 516.

Sir *Edward Coke* was us'd to say, that Church Livings shou'd pass by Livery, and Seisin, and not Bargain and Sale. For 3 things he was us'd to give God thanks, that he never gave his Body to Physick, nor his Heart to Cruelty, nor his Hand to Corruption. He came to all his Great Offices, *nec Préce, nec Pretio*, neither Begging, nor Bribing, 519.

*Edmund Windham* struck Mr. *Clere* in King *Henry* the 8<sup>th</sup>s Tennis-Court, for which he had Judgment to lose his Right Hand, but the King Pardon'd him, 529.

*Northampton* is the dearest Town in *England* for Fuel, 355. *Beaumont*, and *Fletcher*, 544.

Dr. *Holeworth* being offer'd the Bishoprick of *Bristol*, said, he wou'd not wear a *Bristol-stone*, 554.

*Johannes Scotus*, Dr. *Subtilis*, was Born in *Northumberland*, died of an Apoplexy at *Colen*, 556.

The Countess of *Desmond* liv'd 140 years, and recover'd her Teeth, after she had cast 'em three several times, 557.

*Robin-Hood* was an Excellent Archer, and an Arch-Robber. Proverb. To Sell Robin Hoods *Penniworths*, that is, stoln Goods, &c. 558.

*Ann Green* in the year 1650, being Executed for killing her Child, recover'd Life again, 579.

*Rutland-shire* is the least in *England*.

Little *Jeffrey* the Dwarf, was Born here, 582.

*Tho. Parr*, by Anagram, *Most rare hap*, liv'd above 150 years.

From Head to Heel his Body had all over,

A Quickset, Thicket Natural Hairy Cover.

*Gildas* was Born in *Bath*, he died about 570.

*Tho. Corial* was Prince *Henry's* Servant; Sweetmeats, and *Corial* made up the 2<sup>d</sup> Course, 574.

*Carps*, and *Pippins* came first into *England* in *Henry* the 8<sup>th</sup>s time, 820.

Queen *Elizabeth* call'd *Perfius* a Crab-staff, *Martial*, Bawdy, *Ovid* a fine Wag, 831.

*Philemon Holland* a Great Translator of Books, some he wrote with one Pen.

*Holland* with his Translations doth so fill us.

He will not let *Suetonius* be *Tranquillus*, 833.

The best *Tabacco-Pipes*, are made at *Amesbury* in *Wiltshire*.

*Worcestershire*. Here is fine Salt made, reputed the best in *England*.

*Pollio Romulus* being 100 years Old, told *Cæsar*, that he had preserv'd his Vigour of Mind and Body, *Intus Mulso*, *foris Oleo*, Metheglin within, and Oil without, 923.

Bishop *Vaughan*, Bishop of *London*, used frequently this Expression at Table.

*At Meals be glad,  
For Sin be sad.*

'Twas said of him, *Facienda docuit, docenda fecit*; being none of those, *Qui sciunt & non docent*, or *Qui docent & non vivunt*.

*Dolgelley*, a Market-Town in *Merionith-shire*, has Walls 3 Miles high, *Viz.* Mountains that surround it. A Steeple that groweth in it. The Bell on a Yough-Tree, 957.

*Powis* is the Paradise of *Wales*. Proverb.

## C O L L E C T. XIV.

*Galiel. Gilberti Medici Regis Philosophia  
nova, 1651.*

**A** Er est tantum Telluris Effluvium, 29.

Ignis est tantum Calor intensus, page 20.

• Maris Æstas a Lunâ Commovetur, Ibid.

Prope Polum in Hyeme nullus ventus, 33, &c.

Ventus fit cum Humor dissolvens ampliora petit spatia, &c. 33.

Globus hic Terræ & Aquæ magneticis viribus est imbutus, 35.

Mare totum salsum, quia superflua Terrarum. quæ a Mari alluuntur, aut in Maris substantiam erumpunt, aut in sales transeunt, 36. Mare, Fontes, Aer, &c. Sunt Telluris Effluvia, 37. Nullum datur Elementum præter Tellurem, 39.

Nec Aqua, nec Terra est frigida, sed Calida, 40. 85. Motus & Maris & Fluviorum est Circularis, 40.

Cardanus Aerem esse frigidissimum dicit, 23. Aqua non generatur ex frigore, sed ex Aere, 40. Atomæ sunt Corpora Indivisibilia Figuris invicem distincta, 41.

Mare in profunditate vix ad duo Milliaria pervenit, 43. 45. 130.

Aeris altitudo, 20. Miliaria, 43. 45. 53.

Incertum an stellæ fixæ moveant? 48.

Datur vacuum, Ibid. & 52. 53. Motus rectus est Gravium Inclinatio ad Terram, 49.

Et Telluris Pars extra Telluris Effluvia posita, non delabitur, 50.

Terra non quiescit, sed movet, 51.

*In Muscoviâ sputum Glasiatur antequam in Terram Cadit, 54. Gravia non semper descendunt sed hærent in supernis, 56.*

*Motus sit tardior quo Centro propinquior.*

*Terra manet suo loco propriis viribus magneticis, &c. 117.*

*Incertum an Tellus sit in universi Centro ?*

*Et universi Forma sit Circularis ? 113.*

*Gravia a Terra Electricæ alliciuntur, 116. 59. 115.*

*Frigus est tantum privatio, 71.*

*Propter vacuum rigent frigida zona, 72.*

*Tellus volvitur motu diurno propter vacuum, 73.*

*Astrorum virtutes, 80.*

*Animalis vita est nihil aliud quam actus Humoris attenuati intra Formæ Cancellis, 81.*

*Luna est Causa Aëstus, 80.*

*Res dicuntur Comparative tantum frigida, i. e. minus Calida, 84. Calor non est Qualitas sed Actus, est attenuatio Humoris, 88. Lumen solis non est per se Calidum, 89. Frigus feruidiora acrius Constringit, 93. Frigus non sensu percipitur, 94. In Borea raro sunt Pluvia in Hyeme, 94. Est Frigus secundum Quid, & Simpliciter. In vacuo tantum est frigus simpliciter, 95.*

*Medicamenta falso dicuntur attrahere, 96. 99. 100. Galenum refutat Vegetabilia & Animalia attrahunt, 97. 96.*

*Formas substantiales esse Concedit, Ibid.*

*Allium tufum vulnere a rabido cane inflicto applicatum, est Medicamentum præstantissimum, 99.*

*Magnes accurrit ad ferrum, & ferrum ad magnetem, 105.*

*Tellus habet Motum diurnum, 113.*

*Manet Tellus in suo Loco propriis viribus magneticis, 117. 115. Tellus est animata, 125. 141.*

- Et Sol & Luna sunt animati*, 125. 141.  
*Tellus movet*, 126. *Ignis est fluor*, 128.  
*Alpes ad decem milliaria assurgunt*, 131.  
*Terra Circulariter movetur*, 135. *Motu diurno movetur ab Occasu in Ortum*, 139.  
*De Tychone Brabe, & Copernica*, 150. 155.  
*De Cassiopeiâ*, 155. *De motu ad Centrum*, 164.  
*Demense Synodico*, 180. *Astrica virtus Lunar*  
*Maria Commovet*, &c. 186.  
*Sol est ignis potentissimus*, 195.  
*De Colore*, 216. *Forma dat refiguram*, 217.  
*Quæ in Aquâ merguntur Graviora sunt.*  
*Aquâ in eadem proportione*, 219.  
*Observatio est Scientiæ Magistra*, 223.  
*Ætatem Gilberti Colligas*, 227.  
*De Joanne Dee Anglo*, 236. *De Diebus Canicu-*  
*laribus, Qui ad Canis Ortum fervent propter soles*  
*æstivales, minùs vero nunc quam olim, propter Canis*  
*progressionem, ut fixarum omnium: ita ut nunc sit*  
*Anno inclinante*, 242.  
*Author non sibi Constat, Confer.* 242. 244.  
*Orientales venti apud nos Anglos frigidiores quia*  
*subtiliores, & magis penetrant, &c.* 265.  
*Terra Continens multo frigidior Insulâ in eodem*  
*parallelo*, 265.  
*Venti occidentales sunt validissimi quia proveniunt*  
*a Tempestuosi Hibernici Maris Littoribus, ut & In-*  
*sulæ Hiberniæ vaporosâ Regione*, 266.  
*Judea jam sterilis*, 283. *Exarescentibus fontibus,*  
*fatiscientibus agris, &c.* *Mons Caucasus nocte sole Col-*  
*lucet*, 285. *Aqua altius ascendit quam superficies unde*  
*derivatur*, 289. *Gilbertus Scaligerum perstringit*, 298.  
 303. *De Æstu Maris*, 304. 305. 307.  
*Vera Causa pleni Maris, quantum a Cælo derivatur,*  
*est Meridianus Circulus, sive Transitus Lunæ per Me-*  
*ridianum Circulum, aut supra Horizontem aut infra*  
*Horizontem*, 4.

## COLLECT. XV.

Van Helmont's *Vindication*, by George  
Starkey, 1657.

**H**IPPOCRATES for his Great Medical Skill, was named Divine. He was one of the first that left any thing upon Record to us of useful Experimental Practice, 8. *Galen* liv'd about 5 Centuries after him.

Anciently the Chyrurgeon was the Doctor's Man, and the Apothecary the Chyrurgeon's Man, 13. 14.

Feeling of Pulses, Tossing of Urines, Stirring of Close-Stools, Letting of Blood, Ordering of Diet, Purgations, &c. are but meer Impositions, &c. 31.

Poisons are things that by their over-powering activity in the Body, destroy the Vitals. Some are Putrefactive, some Corrosive, others Narcotick. They are all found either in the Animal, Vegetable, or Mineral Kingdom, 92.

*Argent-Vive* is salivative, of a strangling quality, affecting especially the Throat, 100.

A large Dose of *Mercury* is accounted the last Remedy for the Twisting of the Small Guts, 401.

*Aqua-Fortis*, and *Aqua-Regis*, are strong Acids, and most powerful Dissolvents, 97.

*What true CHYMISTRY is*, 109.

The Liquor *Alkabest*, is the Greatest and most powerful Dissolvent, 294.

It cost the Author Nine Years Study to find it out, 295.

*Alkalies* are the fixt Salts of Combustible Concretes, fix'd by the Activity of the Fire, 298.

The *Alkaly* of Tartar is call'd *Respub. Alkalium*, because whatever is to be found in any *Alkaly*, may be found in it, 300.

Volatized *Alkalies* pass to the 4<sup>th</sup> Digestion, 304.

*Rosemary*, and *Sage*, are Cephalick Herbs, and good Remedies in Fevers, 308.

*Empyreum*, 310. *Vita Media*, Consult the Chymical Lexicon; 315.

They are foolish Chymists that only give Salts as they are extracted out of their Ashes, 318. For they pass not beyond the Vessels of the 2<sup>d</sup> digestion.

The Salt of *Tartar* is the best of Salts, 319. And the best of Oils, is the Oil of *Terebinth*, Ibid. Salts are next to *Alkabest*, in Medical Operation, 322.

*Sapo*, *Colostrum*, 325. *Aroph*, 327. *Quare hæc in Lexico Chymico*. The Apothecaries Expos'd, 327. The *Primæ viæ* are the first Vessels. *Phlebotomy* rejected, &c. 271. 328. The Life is in the Blood, and be it never so bad, 'tis the best Friend Nature hath, and the lessening of the Blood is the shortning of the Thread of Life, 329.

*Opium* is the most abstersive Simple of all Vegetables: In it self Poisonous, its praise, Ibid.

*Duumviratus* a strange Notion, 331.

In the Vegetable Kingdom there is not a Simple comparably so Diaphoretick as *Opium*, being Skillfully prepar'd, its *Narcotick* virulency is separated, and it becomes anodynous to the Patient, 333.

Acute Diseases, and many Chronical, not too highly graduated, are Cur'd by the Elixir of volatile *Tartar* alone, given in Wine, &c. 335.

The Symptoms of Fevers. Thirst, Burning Heat, Pain, Lightness of the Head, Oppression at the Stomach, a Dejected Appetite, a Disrelish of Meats and Drinks. Scarce one of 3 Fevers kill, 227. The



The Author's Council and Medicine often amounts not to a Crown, not one in 40 rising to above an Angel, 233.

Wine allow'd in Fevers, 231.

*Cobobation.* *Ignis Gehennæ*, 10. The Great Dissolvent, the Liquor *Alkabeft* is sometimes call'd, 241.

In desperate Cases, sliced Pigeons, and Herrings are apply'd to the Soles of the Feet, 230.

The Plague Curable, 254.

Sir *Theodore Mayhern* was too much for *Phlebotomy*, 256. The Jest of the *Irish-Man*, *Ibid.*

The Lask in the Small Pox is Lethal, 257.

There are sundry sort of Fevers, &c. 258.

The Plague worst of all, next the Small Pox, then the Pestilential, Malignant Pluresie, &c.

The *Castrensian* Fever is without Thirst, and Heat, 261.

The *Adepti* are Compleat Chymists, or Operators in Pharmacy, 275.

*Arcanum Corallinum*, which is, *Paracelsus* his *Diaceltateffon*, that is, Mercury precipitated by means of the Liquor *Alkabeft*, and Corallated by the Water of Whites of Eggs, and is Purgative by Siege, and a most Certain Cure for all Fevers, &c. as long as the Patient is ill, it Purges, and no longer. *Helmont's* Laudanum without Opium (which is the same with *Paracelsus's*) is only Mercury Cohobated so long and oft by that fiery Liquor 'till it be made volatile; and then the Sweet-Oil, or Tincture of the Sulphur separated from the Central Mercury, is the Ladanum of Mercury, Curing Universally all Diseases, in *Tono-unifono*, as *Helmont* speaks; yet without Purging by Siege, 275, 276.

The *Helmontian*-Purges work only on the Diseased, but the *Methodists* on all, &c. 278.

In Hellebore, tho' a Churlish Vomitive Poison, lies hid a Noble Remedy, &c. 281.

*Colocynthida,*

*Colosynthida*, and all the Common Purges and Vomits work, *ex intuitu veneni*, 282.

As Water will quench Fire, so a true Medicine will a Disease, 288. The Gout is never without a Fever, 291.

Diseases are but the fury of the Archeus, *Ibi*. 268.

*Helmont's* way of Curing, *Ibid*.

*Alcalies* cleanse the Body, as Soap doth *Linnen*, 294. All Fevers may be Cured without *Phlebotomy*, 266. All Diseases are Curable to a true Son of Art, 126. 151.

Head-ach, and Tooth-ach are Gouts, 129.

The Vulgar Doctors expos'd, 131. Helebores, Euphorbium, Scamony, are Poisons, 136.

Brandy-Wine is good to bath a part pained, 141. *Valentinus*, *Helmont*, and others, have Cured all Diseases. Sage, or Carduus Posset very good against Fevers, 163.

The Objection, Do you Cure all? Answered, Against all Diseases there is a Remedy, but against Death, none; that only is out of the reach of all Medicines.

Now if God hath numbered a Man's days, it is not to be objected to the disgrace of a Medicine, that it cannot prevail against God's Decree, 181.

Tho' true Medicines cannot triumph over Death, yet they will prevail over the Disease, even when Recovery is impossible.

A true *Febrifuge* will abate Symptoms, refresh, and give a *Levamen*, even where the Seat of Life is possessed by Death, 182.

Continual Fevers Cur'd in 4 days, 186.

The Emperick describ'd, &c. 187.

The *Turks*, *Moors*, &c. had no Physicians.

The Doctors Art destroys more than the Plague, and Sword. The *Romans* had no Physicians for 500 years, &c. 190.

The

The Countess of *Kent's* Powder, and *Gascoine's* Powder, are not now to be met with Genuine, but Spurious, 204.

The Apothecaries sell some of their Slops for 10 times the price it cost them at 1<sup>st</sup> hand, 210.

If you wou'd be further Convinc'd of the utility of Vulgar Medicaments, Consult the Noble *Helmont's Dispensatorium Modernum*, &c. 213.

The Apothecary gratifies the Doctor with the third part of his Gain, 222.

### Physick for Families, by *W. Walwyn*, 1669.

THE *Chineses*, and *Barmian* Physicians are against Phlebotomy. 8. The Blood is the best Friend the Body hath, and *ergo*, not to be wasted. 9. Vesicatories, Cupping-Glasses, Drawing of Silk through the Neck, Issues, Setons, Purges, &c. are troublesom dangerous Operations, and meer Cheats, 18.

A true Benign Medicine, fit for Humane Nature, ought to be *First* Liquid, transparently Clear, Pure, and Pleasant. *Secondly* so qualify'd, that if taken by Men in Health, shall no ways move their Bodies. *Thirdly* such, as being close stop'd, will keep good for some years in all Climates, &c. 21.

### The Titles of his Remedies.

*Refugium Vitæ. Sanguis Vitæ. Vis Vitæ. Lac Vitæ. Salus Vitæ*, &c. 25.

## COLLECT. XVII.

*The Conclave of Physicians, by Gideon Harvey,  
M. D. 1683.*

**A** Chyrurgeon cannot be compleatly Skill'd, without he hath visited Hospitals, Campaigns, Naval Engagements, &c. 18. 20. 36. 40.

Sagacity and Observation is the Soul of a Physician,  
24. The Transfusion of Sheeps Blood into the veins of a Man, is but an idle invention, 33.

Of *Lithotomy*, 44. 45.

Of Tumours, 52. 55.

Bitter things increase Agues, 166.

Bitter Astringents are the most potent Stypticks,  
172. The manner of Adstriction, 173.

Dr. *Willis* his Hypothesis Condemn'd, 185.

The Author was of *University-College* in *Oxford*,  
197. Steel Medicines are dangerous, 214. 199. Ague Fits are caus'd by an high Ebullition of contrary Humours about the Stomach, &c. 203.

The Jesuit is specifick for Agues, 206.

But the Jesuit is not to be given in the beginning of an Ague, 209.

The Ratling in the Throat, is the nearest Symptom of Death, 226.

A Pippin, or Lemmon Posset very good, and Salutar in Fevers, 67.

'Twas *Celsus* his Opinion, that 'tis better to let the Patient die, than to kill him, 84.

*Horæ Medicæ*, 90. How the *Russians* deal with *Medico's*. If the Dose the Physician gives, hath not the expected success, the Doctor is to take the Dose double, &c. 91. *Orvietan*, 106.

There's a great Confederacy between the Dr. and the Apothecary, 109. For the Dr. shares in the Apothecaries Gains.

There

There were no *Medico's* at *Rome*, for 600 Years, 114. *Muscovy* admits 'em not, *Ibid*.

Three fourth parts of the World live longer and better without Physicians, 118. The *Iliac* Passion very common in *India*, *Ibid*.

The Author promiseth a better stock of Remedies in a single Sheet, than can be found in all the Books of Physick, 120.

Of remitting Fevers, 123. Of the *Goa-stone*, 128. The Drs. Consolatory Harangue, 131. The *Jesuits* Bar, is good in intermitting not continual Fevers, 141. its price 5s. an Ounce, 149. 'tis mortal in all continual Fevers, *Ibid*.

The *Jesuits* Bark is a Drug sent us from *Peru*, in the *Spanish West-Indies* by the *Jesuits*, but whether it is brought us in its Natural or Artificial dress and condition, is not yet well known; 'tis very bitter. 150.

The Author thinks it comes *hither Artificially* prepar'd, and not, in *Puris Naturalibus*. The *Jesuits* make great profit by it, 152.

## COLLECT. XVIII.

*Collectanea Chymica*, 1684.

**A** *Lkabest* is a *Catholick Menstruum*, call'd *Ignis-aqua*, resolving all things into their 1<sup>st</sup> liquid matter, 4. It is a noble circulated Saline Spirit, 'tis call'd the Philosophers Fire: Of which they speak. The vulgar burn with Fire, we with Water.

The *Alkabest* is made of Mans Blood and Urine. There's an Excellency in Mans Blood, *above all other Blood*, 20.

Van

*Van Helmont* says, the Philosophers call *Argentum Vivum*, their Wine, and the *Præcipitolum* they call their Tartar; both make the Philosophers, *Spiritus Vini Phylosophicum*, which they call by a 100 Names, as, *Astrum Mercurii*, *Spiritus Mercurii*, their Fire, their *Sal Mineral*, and *Sal Armoniacum*, their *Horse-dung*, their *Balneum Mariæ*, &c. 49. 50.

Tho' Man's Urine be an Excrement only, yet its Salt hath not its like in the whole Universal Nature, 8. *Nihil demergeretur in Mercurio nisi Sol*, 28. The Philosophers Egg, *Quære* what 'tis? 32. The Oil of Gold is one of the greatest Medicines under the Sun, three drops are able to extinguish any Sickness.

*Bernard Earl of Trevisan* says, that the *Philosopher's-Stone* is Compounded of no other thing but *Sol*, and *Luna*, &c. 83.

The Stone, or perfect Work cannot be made in less time than a year, 86. The Stone is a Water clear and bright, permanent pure and shining, of a Celestial Colour, 87.

The Philosophers Stone is of two sorts, the one white, which will Convert Copper into fine Silver, the other red, transmuting all Bodies, especially Mercury, Lead, and Silver into pure Gold, 110. 116. One Ounce will transmute a 100 Ounces, &c. yea a 1000 Ounces, &c. 118. 131.

The Oil that's made of *Sulphur Vive* set on fire, and called commonly Oil of Sulphur, *per Campanam*, is admirable to preserve Health; two drops of it taken before each Meal, in a small draught of Beer. By this means, *Van Helmont* made *John Mass* a mean indigent Man at *Brussels*, to live a 100 years well and healthy, 140. It is a rare Cleanser of the Teeth, Sweetner of the Breath, and a most Excellent Catholick Medicine, &c. 414. *Sulphur Vive* is not common Brimstone, but Mineral Sulphur.

*Geo. Starky* Dyed of the Sickness in *London*, 1665: by venturing to Anatomize a Corps Dead of the Plague, 151.

In *France*, they make Bread of Chesnuts, 162.

Men have Liv'd ten or twelve Days, by sucking a little of their own Blood, or drinking their own Urine, and thirty days, by rousing only a small piece of Allom up and down their Mouths five or six times a day, 164. *Aaron* Roots will make delicate Starch, 170.

## COLLECT. XIX.

*Tumba Semiramidis*, 1684.

**A**S Gold contains the Vertues of all Minerals, and Wine of all the vegetable Kingdom, so doth the Heart of Man, the Vertues of all the Animal Kingdom, 8. But yet the Philosopher's Stone is to be sought in the Mineral Kingdom, *ibid.*

All Metals clean and unclean, are internally *Sol*, and *Luna*, and *Mercury*.

*Sol* and *Luna* are the Physical Subject of the Stone, 10. *Mercury* is the first matter of the Stone, and of all Metals. What a Quintessence is? 21.

The Stone is called the Oriental King, 29.

The Philosophical Egg, is a fixing Vessel, of the form of an Egg, inservient to Chymical Operations, &c.

COLLECT.

## COLLECT. XX.

*A Relation of the Lord Henry Howard's journey from London to Constantinople, &c. 1671.*

**T**He *Turks* during their *Ramasan* or *Lent* (which lasts a whole Moon) fast all day, and neither eat nor drink till the Stars appear, and then they eat and drink what they will, &c. 214.

All Dogs without Collars are destroy'd at *Vienna*, 50. *Adrianople* is the best and most considerable Town between *Arigonium* and *Constantinople*, 150.

Among the *Emperor's* Presents, were 4 *Irish* Grey-Hounds, 159. The *Muffy* is as a Pope to the *Turks*, 160. The *Turks* have no Printed Books, 181. They wash their Hands before and after eating, which, with them, is as often as their Prayers, that is, 4 or 5 times a day, 181. At Meat they sit *Taylor-wise*, cross-Legg'd on or without Cushions on the Ground, 182.

Tobacco is prohibited in and near the *G. Signior's* Court, 184. Their Tables are Pewter or Tin, and of round Figure. Only the *G. Signior's* Table is Gold, 185. They have never more than one Dish at Table at once, they begin with *Rost Meat*, then to *Boyl'd*, &c. the Meat cut all in joynts and bits, so tender Roasted and *Boyl'd*, that they use no Knives, 186.

Spoon Meats they eat with long Wooden Spoons. Brown-Bread is cut before hand, and serves for Trenchers, *ibid.* *Constantinople* was taken by *Mahomet* the 2<sup>d</sup>, by assault, in the Year of our Lord, 1453. 193.

It is separated from *Asia*, by an Arm of the Sea, about half a League broad, 194. The City is but ill built, the Streets very narrow, so as in many places Coaches and Waggon's cannot pass. There's only one fair Street which traverses the Town to the *Adrianople* Gate.

The



The *Moschees* are very Noble Structures, all made in imitation of *Sancta Sophia*, which was built by *Justinian* the Emperor, 195. Hard by it is the *Seraglio*, which is three Miles in circuit, 196. In *Turky*, all the Gloves are for one Hand, for they wear but one, 211.

The Rivers of *Hungary* are full of Fish, especially the *Bosch*, of which 'tis said, two parts of it are Water, and the third Fish.

In *Esseck*, the Streets are planck'd with Timber, the Wooden Bridge there over the *Drave*, and the moorish places, is about 4 Miles long. See *Captans Describ'd*. 82.

## COLLECT. XXI.

### *The History of the Turks. 1684.*

THE Great Action between *Tamerlain* the *Tartar*, and *Bajazet* was transacted upon the Plains of *Sennas* in *Asia*, from 7 in the Morning till 4 in the Evening, wherein *Bajazet* fought on Foot in the middle of the *Jamizaries*, was wounded and taken. His Son *Musa* was taken also, and his Son *Mustapha* slain, about 200000 fell on either side, 85. *Scanderbeg* was the Son of *John Castriot* Prince of *Epirus*, his name was *George*, but *Amurath* named him *Scanderbeg*, who afterwards became the Mawl Terror of the *Turks*, 95.

*John Huniades* Vaivod of *Hungary*, under *Vklislaus*, chosen King of *Hungary*, worsted the *Turks* in several battles, 97. The *Turkish* Tyrants have always certain Ministers of Death, and Instruments of Cruelty: They are certain Strong Men bereaved of Speech, those they employ to strangle and torture whom

whom they please, 134. The *Fanizaries* often insult over their Emperors, 135.

Pope *Alexander* the sixth was a Firebrand of discord. See his Villanies, 139. *Cæsar Borgia* was a Pope's Bastard, 140.

The Battle between *Hysmael* the *Persian*, and *Selimus* was fought in the *Calderan* Fields, near the City of *Cois*, Anno. 1514. *Selimus* lost 30000. *Hysmael* but 8000. The *Turks* were eight to one, 159.

The *Arabian* Sands do often move by the Winds, and work like the Sea, rising in the Air, and hindring the sight of the Passengers, and drowning them, 169.

The great City *Cair* hath no walls, 'tis situate on the *Nyle*, adorned with many Stately Tow'rs, Pyramids, Palaces, Temples, and Monument of the *Egyptian* Kings; serving rather for Pleasure than Strength, 171.

*Alba Regalis*, was the Coronation Place of the Kings of *Hungary*, 196. *Barbarusa*, of a poor fisher Boy, became a *Pirate*, and afterward King of *Argier*, and made one of the *Bassas* of *Solyman's* Councill, 6.

*Guy* was the ninth, and last King of *Jerusalem*, was overthrown by *Saladine* the *Egyptian* Sultan, who soon after took *Jerusalem*, 27.

*Frederick* the *German* Emperor 1<sup>st</sup> advanced in the 2<sup>d</sup>. Expedition, and after many overthrows given to the *Turks* in many Battels, he perish'd in the pursuit of his Enemies, in the River *Salepbie*; where his Horse floundred, and threw him out of the Saddle, with his right Foot hanging in the Stirrup, after which manner, e're he cou'd be reliev'd, he was drag'd through the River, and so bruis'd, that whan he was taken up, he was heard to say no more, then, Lord receive my Soul, e're he gave up the Ghost; in the 70<sup>th</sup> Year of his Age.

The

The Emperor *Charles* with his whole Fleet and Army, were overthrown at *Argier*, by a Tempest, suppos'd to be rais'd by Enchantment. 29.

*Count Serenus* his Heroick Speech, valour and fall, 43. In the Battel of *Lepanto*, of the *Turks* there fell about 32000, of the *Christians* about 7000. 57.

The *Turks* rommag'd a great part of the Sea Coasts of *Italy*, 119. *Mahomet* the 3d. strangled his 10 Brethren. 123.

The *Cham* of *Tartary* is prompt to serve the *Turks*, because they often interchange in Marriages, and if the *Ottoman* Family fail, the Empire descends to the *Tartar Cham*, and besides he receives yearly a Pension from the *G. Signior*. 167.

No Ambassadors are permitted in the proper habit of their Countrey to approach the *Sultan*, but they must come in *Turkish* Habits; and always with Presents. They are allow'd to kiss the Hem of the Garment of the *G. Signior*, 184. See the *G. Signior's Grandeur*, 188. Prince *Visnoviskie* a *Moldavian* was Poyson'd by a *Greek Priest*, in the Sacrament, for which he was fry'd to Death in a wire Chair, 194.

One of the *Turkish* Tortures is after this manner.

The Party is laid upon his Belly on a Table, and then they beat his Buttocks, the Calves of his Legs and Soles of his Feet with a flat staff; giving him e're they cease a 100 or 200 blows. 197.

The *Sultan's* Oath, see, 202.

The *Janizaries* often Hector the *Sultan*, 210.

The *Sultan's* Letter by *Sir Tho. Row*, to *Charles* the First. 239.

*Babylon* was won by the *Turks*, *An. Dom*, 1638.

The *Turkish* Ladies carry Daggers. 266.

The Earl of *Winchelsea* was sent Ambassador to the Port, in the Year 1661. *Count Serini* was slain by a wild Bore, whom he had wounded in several places, but the furious Beast turned upon him, and

with his Tusk struck him on the Knee, which made him fall to the Ground, and before he cou'd recover himself, with a 2<sup>d</sup> stroak he was mortally wounded in the Head, and soon after he died in the Arms of one of his Pages, 300. *Sabatai Seni*, a Jewish Impostor, feigned himself to be the Messiah, 303.

*Chimacham* is the Grand *Visiers* Deputy, 349.

Sir *John Finch* went Ambassador to the Port.

The French Ambassador hotly contended with the G. *Visier* about his sitting place in Audience, and flung the Cushion over his Head, which fell upon the G. *Visiers* Head, who grievously resented the affront, and caused him to be thrust out of the Audience Chamber, 356.

Vice Admiral *Herbert* about the Year, 1680. with a Squadron of His Majesties Frigats took about 40 *Algerines*, and brought those Pyrats so low, that not only they, but those of *Tripoly* and *Sally* were oblig'd to receive such Terms of Peace as the Victor wou'd allow. The Engagement then between Captain *Booth* in the Adventure Frigat, and the Golden Horse of *Argiers*, having 40 Guns and 500 Men, Commanded by one *Morat Raiza*, a Dutch Renegado is remarkable, the Golden Horse was then taken, 361.

Count *Teckley* rebels against the German Emperor, and adheres to the G. Signior, because he promised to make him Prince of *Transylvania*, 365.

The G. Signiors Palace, Port, or Seraglio, is 3 Miles in compass; It hath on the one side, the Sea; on the other, the Haven; the other 2 parts are invested with the Buildings of the City.

*Constantinople* is about 16 Miles in Circuit, the Sea bears on the North and South sides, and on the East it is divided from *Asia* by a large Channel which runs from the one Sea to the other, being 7 Miles

Miles in length, called the Streights of *Bosphorus*. The City is built upon the declining of a Hill 379.

In the Seraglio, the *Sultan* has many Rooms hung with Cloth of Gold, Gilded Skins and Tapestries made of Silk and Gold. His Lodging Chamber is Garnished with Precious Stones, he seldom puts on one Suit of Apparel twice, a 1000 Aspers, and 20 Ducats of Gold are put in his Pockets every Morning, the which, if he does not Distribute that Day, at Night is to be the Fee of those that wait on him in his Chamber, 380.

## COLLECT. XXII

[ *A Treatise of Wind, by Dr. Fienus. 1668.*

**A** Pollo gave the 1st Principles of Physick, which were after Celebrated by *Æsculapius*, and then by *Machaon* and *Podalirius*. The Sons of *Æsculapius* deliver'd the Art to their Posterity, not by Writing, but Traditional Instruction, to the Time of *Hippocrates*; who was the first that committed the Art to Writing. Preface. *Galen* purg'd his Writings from Thorns and Weeds, and reduc'd 'em into Method.

A Flatus, or Wind, is an abundance of Vapours raised in the Stomach, Hypochondres or Guts, by a weak heat, 9. and imperfect Concoction, 14.

The Stoicks said that the Emission of Wind at the Fundament shou'd be as free as a Belch; and so wou'd *Claudius Cæsar* have it, *Suet. in vitâ Claudij*, 17.

Wind produceth Tortures by lacerating the Tunicles, and making Solution of Unity.

There are two Causes of Pain, the one is an unequal Distemper, as Cold coming upon Heat, the other when continuity is dissolv'd, 19.

Milk, Mead, Perry and Syder, breed Wind. The clear old Bear, well boyled, is nearest to Wine, 27.

Night-Drinking upon a full Stomach generates Wind most of all. A cold Stomach breeds Wind, which will fly like Darts through the Body.

The Feet shou'd be kept warm, for Nerves go from 'em to the Stomach, and presently cool it, if Cold affect the Feet, 29.

The Tooth-ach is the product of Wind, 35.

Rest binds, and Motion opens, 41.

There are 3 sorts of Dropsies, Anasarca, which is a preternatural increase of the Bulk of the Body. Ascites, whereby the Belly swells unmeasurably; the 3d. is a Tympany, or Dry-Dropsie, the effect of Wind, 45.

The Tympany is the worst of Dropsies: It is never Cured, when Confirmed 53.

Wind that goes out with noise, shews the straitness of the Vessels, and much Wind.

Liquids shou'd be eaten before Hard, Loosners before Astringents, those of easie Concoction before hard, 56.

Fasting alone is sufficient to Cure any Disease, from Crudity or Wind, 59.

It is the Doctrine of *Hippocrates*, and fit to be written in Gold in every House.

That we ought not to eat to fullness: And to be ready to take pains, *Ibid.*

Reasonable Exercise, and a spare Diet, is the best Remedy against the Wind. Mustard and the like attenuating

attenuating heating Sauce, Spices, Sage, Rosemary, &c. Good.

The knowledge of the Disease gives the Indication of Cure, 62.

The Tooth-ach from Wind is Cured by applying a Roasted Turnep behind the Ears, for it revels strongly, and abates the pains, 72.

*Galen* saith, that nothing taken at the Mouth can come with its full force to the Guts, but a Clyster reacheth 'em.

For the Cure of the Tympany, see a Decoction that doth Wonders, 105.

Exercise conduceth much to the Cure of Wind and Dropsies, 107.

The Windy Rupture is Cured by heating the part against the Fire, and with dry fomentation, with hot Clouts often applyed, 110.

*Lumen de Lumine*, by E. P. 1651.

It is a Miracle how the Earth is supported in the Air, a fluid substance, through which even Froth and Feathers will sink. Certainly if the Animation of the World be denied, there must needs follow a Precipitation of the Earth by its own Gravity.

We see that our own Bodies are supported by that Essence, by which they are animated, but when that Essence leaves them, they fall to the Ground, till the Spirit returns at the Resurrection.

I conclude then, that the Earth hath in her a Fire-Soul, a strong Spirit that bears her up, as the Spirit of Man bears up Man, and this is the Prester of *Zoroaster*, &c. 80.

As for Universals in the Abstract, there are no such Things, they are empty imaginary whimsies, for Abstractions are but so many fantastick Suppositions, 17.

## COLLECT. XXIII.

*The Second Wash by the same Eugenius Philalethes, 1651.*

**T**Is thought the dark opac parts of the *Moon*, are Water, and the Luminous Earth, for this Element being solid, reflects the Sun Beams, and is Guilded therewith, but the Water takes 'em in without any Repercussion that is sensible to us, and hence it looks like Spots, or the Man in the Moon, 24.

See the Analogie between the Earth and Flesh, 26.

The Flux and Reflux of the Sea, is the pulse of the great Animal, the Globe of Earth and Water.

The Center of the Earth answers to the Heart in an Animal, and to all the motions thereof. The Central Sun, or Spirit in the Center of the Earth, by its continual heat and action expels the moisture or Water to the Circumference, and with a restless pulse keeps it in agitation, lest the parts stagnate and putrifie, 30.

Every Agent lies in the Center of his Body, &c. which is the reason that all Physical motions proceed from the Center to the Circumference, and not from the Circumference to the Center. Such a motion is this Flux of the Sea, *Ibid.*

The Author, viz. Mr. *Vaughan*, calls *Des Cartes* a Ridiculous Scribler, 34. See the Analogy, between Blood and Water, *Ibid.* If we suppose an Infirmary of Parts in every Body, it will follow, that all Bodies are equal, that a point is Parallel to a Line, & Mite as big as a Cheese, 48.

The



The Flux and Reflux of the Sea is not from the Moon, which is an outward Principle, but from its own inward Principle, or Spirit in its Center; for all natural motions are from an inward Principle, and the Sea being a Natural Body, its motions must be from a Natural inward Principle, and it needs not be rockt by the Moon, 60.

See there more Arguments to prove that the Flux and Reflux doth not depend upon any Lunar Causality. One Argument is, The Sea was made the third Day, the Moon on the 4th, so that there was a Flux, before there was a Moon, 65.

Privation properly is no Principle of a Natural Body, for a Principle properly is a substantial constitutive part or ingredient of the Principiatum or Body. It is true, Privation conduceth to Generation. *Viola est ex non viola*, but it is no Principle, &c. 76. It is *Causa sine qua non* of Generation, and so is the Sun, Time and Place, but a Cause so qualify'd is no Principle.

## COLLECT. XXIV.

### *Medicina Salernitana.*

**A** Nglorum Regi scribet Tota Schola salerni,  
*Si vis incolumen, si vis te reddere Sanum;  
 Curas tolle Graves, irasce crede prophanum.  
 Ne miſtrum retine, nec Comprime fortiter anum.  
 Si tibi deficiant medici, medici Tibi fiant  
 Hac tria, mens Hillaris, requies, moderata Diata.  
 Hac illac modicum pergat, modicum sua membra  
 Extendat, Crines peſcat, dentes fricet, iſta*

*Confortant*

*Confortant cerebrum, confortant cœlera membra.  
 Late cale, sta prænse, vel i, frigesce minute.  
 Fons, Speculum, Gramen, Hæcdant oculis relavamen  
 Sit brevis aut nullus tibi somnus meridianus :  
 Ex magna cœna stomacho fit maxima pœna,  
 Ut sis nocte levis, sit tibi cœna brevis.  
 Tu nequam Comedas, stomachum ni noveris esse,  
 Purgatum vacuumq; cibi quem sumpseris ante.  
 Caseus est nunquam quia Concoquit omnia sequam.  
 Si bona vina Cupis, quinq; hæc laudantur in illis :  
 Fortia, formosa, & fragrantia, frigida, frigida.  
 Si nocturna tibi noceat putatio vini,  
 Hoc tu mane bibas iterum, & fuerit Medicina.  
 Gignit & humores melius vinum meliores :  
 Non acidum sapiat Cervisia, sit bene clara.  
 Autumni fructus caveas, ne sit tibi luctus.  
 De mensa sume quantum vis Tempore Brumæ.  
 Salvia cum Ruta faciunt tibi pocula tuta.  
 Si fore vis sanus, ablue sæpe manus ;  
 Panis non Calidus, nec sit nimis inveteratus.  
 Ne comedas crustam, choleram quia Gignit adustam.  
 Est porcina Caro sine vino pejor ovina ;  
 Si tribuas vinum, fuerit cibus ac medicina.  
 Inter prandendum sit sæpè parumq; bibendum,  
 Si sumas ovum, molle sit atq; novum.  
 Lac œdiocrœis sanum, Caprinum, post Camelinum.  
 Ac nutritivum plus omnibus est Asininum.  
 Plus nutritivum vaccinum, sic & ovinum.  
 Caseus & panis sunt optima fercula sanis.  
 Si non sunt sani, tunc hunc ne jungito pani.  
 ——— Unica nux prodest, nocet altera, tertia mors est.  
 Singula post ova, pocula sume nova.  
 Est melius Cerebrum Gallinæ quem reliquorum.  
 Emendat visum, stomachum Confortat Anisum.  
 ——— Urunt Res salsæ visum, semenq; minorant,  
 Et Generant scabiem, pruritum sive rigorem.*

*Jejuna*

*Jejuna vigila, Caleas dape, tuq; labora,  
 Inspira Calidum, modicum bibe, comprime flatum :  
 Hæc bene tu serva, si vis depellere Rheuma.  
 Ossibus ex denis, bis centenisq; novenis,  
 Constat Homo, denis bis dentibus & duodenis.  
 Ex ter centenis decies Sex quinqueq; venis.  
 Tollere nodosam nescit Medicina podagram. Ovid.  
 Denus Ceptenus vix Phlebotomon petit Annus ;  
 Omni mense probe confert inucisito venæ,  
 Hi sunt tres menses ; Maius, September Aprilis,  
 In quibus Eminuas, ut longo tempore vivas.*

---

## COLLECT. XXV.

## Impedimentis Phlebotomiæ.

**F***Rigida Natura, & frigens Regio, Dolor ingens,  
 Balnea, post coitum, minor ætas, atq; senilis.  
 Sanguine substracto, sex horis est vigilandum.  
 Ne nervum lædas non sit tibi plaga profunda :  
 Sanguine purgatus ne Carpas protinus Escas.  
 Principio minuas in Acutis, perperacutis.*

*Subaudi sanguinem minuas.*

*Quæ membra, quoq; tempore venæ sectione evacuanda.  
 Ver æstas, Dextras, Autumnus Hyemsq; sinistras,  
 Sunt septem Res naturales, viz. 1. Elementa, 2. Tem-  
 peramentum, 3. Humores, 4. Membra vel Partes, 5.  
 Facultates, 6. Operationes vel Actiones, 7. Spiritus.*

*Sunt etiam Sex Res non-naturales, viz.*

*1. Aer, 2. Cibus & Potus, 3. Repletio & Evacuatio,  
 4. Exercitium, seu motus & quies, 5. Somnus & vi-  
 gilia, 6. Accidentia seu motus Animi.*

*Dicuntur non-naturales, quia tam morbi quam sa-  
 nitatis causâ esse poterunt.*

## COLLECT. XXVI

*Of the Univerſity of Oxford, 1651:*

**S**OME ſay this Univerſity was Tranſlated from *Greek-Lade*, a Town in *Wiltſhire*, to *Oxford*; ſo called from the River *Ouſe*, (in *Latin* *Iſis*.) Others ſay 'twas founded when *Oxford* was 1<sup>ſt</sup> built, many Years before Our Saviour's Birth. The moſt agree that *Alfred K.* of the *West-Saxons*, about the Year 872, was the Principle Founder of it. At preſent there are in it 18 Colleges well endow'd: 7 Halls, that have no Endowment of Land.

1. Unverſity Coll. founded, 872. by — *Alfred* by the Name of *Great-Hall*, or Univerſity Coll. The Students thereof were maintain'd out of the Kings Exchequer, till *K. W.* whom the Conqueror did take the ſame away from 'em: Yet afterwards, it hath been well endow'd by the Benefactions of *William Arch-Deacon of Durham*, *Dr. Sbirlow Bp. of Durham*, &c. In the ſame at preſent there is a Maſter, 8 Fellows, one Bible Clerk, with Servants and other Students; the whole Number being 73.

2. *Baliol* Coll. founded, 1262. by *John Baliol, Ld. High Conſtable of Scotland*.

It is the 1<sup>ſt</sup> endow'd Coll. in *Oxford*: There are in it a Maſter, and about 11 Fellows, 11 Scholars, 4 Exhibitioners; the whole Number about 138.

3. *Merton* Coll. founded, 1274 by *Walter de Merton, Ld. Chancellor of England, Bp. of Rocheſter*. In the College there is a Warden, 21 Fellows, 14 Scholars

Scholars call'd Post-Masters, which serve the Fellows; the whole Number here is about 80.

4. *Excester Coll.* founded 1316 by *Walter Stapuldon* Bp. of *Excester*, it was 1<sup>st</sup> call'd *Stapuldon-Hall*: At present there is here a Rector, 22 Fellows, 2 Pensioners, Students and all about 230.

5. *Orial Coll.* founded 1337 by King *Edward* the 2<sup>d</sup>, and called *St. Mary-Hall* (*Vulgo Orial Coll.*) here is a Provost, 18 Fellows, 12 Pensioners, Students, Servants and all make up about 106.

6. *Queens Coll.* founded 1340. by *Robert Eaglesfield*, and commended to the Patronage of the *Queens of England* successively. Here is a Provost, 14 Fellows, 7 Scholars, 2 Chaplains, in all about 160.

7. *New Coll.* founded 1375. by *William Wickam*, alias *Perot*, Dean of *St. Martyns le Grand*, Arch Deacon of *Lincoln*, *Northampton* and *Buckingham*, Provost of *Wells*, Prebend of 12 several places, principal Secretary to *K. Edward* the 3<sup>d</sup>, keeper of the Privy Seal, Bp. of *Winchester*, Ld. High Treasurer and Chancellor of *England*: Dedicated to God the Father and the Virgin Mary, endow'd by himself with Lands for the maintenance of a Warden, 70 Fellows and Scholars, 10 Chaplains, 3 Clerks, one Organist, 16 Choristers, besides Officers and Servants; and before he built the same, he gave Exhibitions to 50 Scholars, for the space of 10 years in this University.

He also founded a Coll. at *Winchester*, for one Warden, 10 Fellows, 2 Schoolmasters, and 70 Scholars, with Officers and Servants, all maintain'd at

at his Charge. From hence he ordain'd shou'd be chosen the best Scholars to supply the vacant places of the Fellows in *New-Coll.* wherein (as is said before) is one Warden, 70 Fellows and Scholars, 10 Chaplains, 3 Clerks, one Organist, 16 Choristers, besides Officers, &c. in all 135.

8. *Lincolne Coll.* founded 1420. by *Richard Fleming* Bp. of *Lincolne*. Here is one Rector, 15 Fellows, 2 Chaplains, 4 Scholars, besides Officers and Students, being in all about 109.

9. *All-Souls Coll.* founded 1437. by *Henry Chicheley*, Dr. *Lawes*, Arch-Bp. of *Canterbury*, in the 16 year of *K. Hen.* the 6th. Here is one Warden, 40 Fellows, 2 Chaplains, 3 Clerks, 6 Choristers, besides Officers and other Students, the whole Number being 70.

10. *Magdalen Coll.* founded 1459. by *William Pattin*, alias *Wainfleet*, from the place of his Birth, having been Provost of *Eaton*, Bp. of *Winchester*, and Ld. Chancellor of *England*. He first founded *Magdalen-Hall*, and after that this College, and endow'd it with Lands for the maintenance of a President, 40 Fellows, 30 Demies, or Scholars, 4 Chaplains, 8 Clerks, 16 Choristers, School-Master and an Usher, 3 Readers of Divinity, Moral and Natural Philosophy; besides divers Servants and Students, in all about 220.

11. *Brazen-Nose Coll.* founded 1515. by *William Smith*, Bp. of *Lincolne*, first Ld. President of *Wales*, he builded this Coll. in the 1st year of *Henry* the 8th, by the Name of *Kings-Hall*, or Coll. of *Brazen-Nose*: Here is a Principal, 20 Fellows, besides Scholars, Officers, &c. in all 186.

12. *Corpus*

12. *Corpus Christi* Coll. founded 1516. by *Richard Fox*, Bp. of *Durham* and *Winchester*, Godfather to *Henry 8th*, here is a President 20 Fellows, 20 Scholars, 2 Chaplains, 2 Clerks, 2 Choristers, those with other Officers and Students make up 70.

13. *Christ-Church* Coll. founded 1546. in part by *Tho. Wolfey* Cardinal, Arch-Bp. of *York*; while he was raising that structure, he was pull'd down himself. And *Henry the 8th* carry'd on his Intentions and perfected the Building, removing the Episcopal Sea from *Ousney* to this place: Here is a Dean, 8 Canons, 3 Publick Professors of Divinity, *Hebrew* and *Greek*, 100 Students, 8 Chaplains, 8 Singing-Men, one Organist, 8 Choristers, 24 Alms-Men, and a Free-School for Scholars, the Number here is about 223.

14. *Trinity* College founded 1556. by Sir *Tho. Pope* Kt. in *Q. Mary's* Reign. Herein is a President, 12 Fellows, 12 Scholars, besides Servants and other Students.

15. *St. John's* Coll. founded 1557. by *Hen. Chicheley*, Arch Bp. of *Canterbury*, but afterwards rebuilt by Sir *Tho. White* Merchant *Taylour*; Here is a President, 50 Fellows and Scholars, a Chaplain, a Clark besides an Organist, other Students and Servants in all 110.

16. *Jesus* Coll. founded 1572. by Queen *Elizabeth*, here is a Principal, 16 Fellows, 16 Scholars, besides other Students and Servants, being about 109.

17. *Wadham* Coll. founded 1613. by *Nicholas Wadham* Esq; in the 7th year of the Reign of King *James*, or rather by *Dorothy* his Wife after his Death, by his special order: Here is a Warden, 15 Fellows,

Fellows, 16 Scholars, 2 Chaplains, 2 Clerks, besides Students, Officers, in all 129.

18. *Pembroke Coll.* founded and endow'd 1620 by *Thomas Tisdal*, of the County of *Oxford* Esq; and *Richard Wightwick* B. D. here is a Master, 10 Fellows, and 10 Scholars Students, &c. in all about 169.

There be also in this University seven Halls, wherein many Students live at their own Charge, 1 *Glocester-Hall*, 2 *Edmund-Hall*, wherein is a Principal, and about 90 Students, 3 *St. Albion-Hall*, built by the Abbot of *St. Albons* for their Monks to study in, here is also a Principal, and about 90 Students, 4 *Hart-Hall*, where is a Principal, and a 100 Students.

5 *New-In-Hall*, here is a Principal, and 140 Students. 6 *St. Mary-Hall*, wherein is a Principal and a 100 Students. 7 *Magdalen-Hall* founded by *William Wainfleet* aforesaid, wherein is a Principal and 204 Students.

The total Number of Students and Scholars of all Degrees in this University in the year 1651. was about 3247.

## COLLECT. XXVII.

### *Of the University of Cambridge.*

Some Antiquaries affirm, it was founded by *Cantaber*, a Prince of *Spain*, Brother to *Bartholine* King of *Ireland*, Son-in-Law to *Gurgurtius* King of *Brittain*, and hence call'd *Cantabriga*. But the chiefest conclude that *Sigebert* King of the *East-Angles*, was the principal Founder thereof, about the year 630.

At this present it consists of 16 Colleges and Halls well Endow'd. King *Henry* the 6th's Chappel there, and *Trinity Coll.* founded by *K. Henry* the 8th, are very rare and extraordinary Structures.



1. *St. Peter's* Colledge founded 1280, by *Hugo de Balsham*, Bishop of *Ely*. Here is a Master and nineteen Fellows, twenty nine Bible-Clerks, eight poor Scholars, Students, &c. in all 106.

2. *University-Colledge* founded 1326, by *Rich. Badew*. Here is a Master, eighteen Fellows, thirty six Scholars, twenty poor Scholars, besides other Students, &c. in all 106.

3. *Pembroke-Hall* founded 1343, by *Mary de St. Paul*, Countess of *Pembroke*; wherein there is a Master, nineteen Fellows, one *Tanquam*, thirty three Scholars, &c. the whole number being 100.

4. *Corpus-Christi-Colledge* founded 1351, by *Henry Monmouth*, surnam'd *Torto Collo*, Earl of *Lincoln*, Duke of *Lancaster*; here is a Master, twelve Fellows, thirty seven Scholars, Students, &c. 126.

5. *Trinity-Hall* founded 1353, by *Will Bateman*, Bishop of *Norwich*. It hath a Master, twelve Fellows, fourteen Scholars, Students, &c. 60.

6. *Gonvil and Caius's* Colledge founded 1353. by *Edmund Gonvil*, Rector of *Terrington* and *Rushworth*, in *Norfolk*; and also by *John Caius*, Doctor of Physick. Here is a Master, twenty five Fellows, one Chaplain, sixty nine Scholars, Students, &c. in all 209.

7. *Kings-Colledge* founded 1441, by *Henry* the Sixth of *England*, &c. Here is a Provost, seventy Fellows and Scholars, three Chaplains, sixteen Choristers, Student-Servitors, &c. the whole number being 140.

8. *Queens-Colledge* founded 1448, by *Margaret Andegavensis*, Consort of King *Henry* the Sixth. Here is a President, nineteen Fellows, twenty three Scholars, three Lecturers of Hebrew, Arithmetick and Geometry, besides Students, Officers. The whole number being 190.

G

9. *Katherine.*

9. *Katherine-Hall* founded 1475, by *Robert Wood-larke*, D. D. It hath a Master, six Fellows, ten Scholars, nine Exhibitioners, besides Servants, &c. in all 150.

10. *Jesus-Colledge* founded 1496, by *John Alcock*, Bishop of *Ely*. It hath a Master, sixteen Fellows, twenty four Scholars, besides Officers, Students, &c. in all 110.

11. *Christ-Colledge* founded 1505, by *Margaret Countess of Richmond and Darby*, Mother to King *Henry the Seventh*. Here is a Master, thirteen Fellows, sixty Scholars, which with Officers and other Students make up 166.

12. *St. John's Colledge* founded 1508, by the said *Margaret* Mother to King *Henry the Seventh*. Here is a Master, fifty four Fellows, eighty four Scholars, besides Officers and other Students, &c. in all 282.

13. *Magdalen-Colledge* founded 1519, by *Edward Stafford*, Duke of *Buckingham*. Here is a Master, eleven Fellows, and twenty two Scholars, besides other Students and Officers, in all 140.

14. *Trinity-Colledge* founded 1546, by King *Henry the Eighth*. 'Tis one of the most Uniform Colledges in *Europe*; wherein is a Master, sixty Fellows, sixty seven Scholars, four Conducts, three Publick Professors, thirteen poor Scholars, a Master of the Choristers, six Clerks, ten Choristers, twenty Alms-men, &c. the whole number being 440.

15. *Emanuel-Colledge* founded 1584, by Sir *Walter Mildmay*, Chancellor and Treasurer of the Exchequer. Here is a Master, fourteen Fellows, fifty Scholars, ten poor Scholars, besides Officers, Servants, and other Students, in all 310.

16. *Sidney*

16. *Sidney Suff.x* - Colledge founded 1598, by *Frances Sidney* Countess of *Suffex*, Sister to Sir *Henry Sidney*, Knight, Lord-Deputy of *Ireland*, and President of *Wales*. Here is a Master, twelve Fellows, thirty three Scholars. There are added four Fellowships, and eight Scholarships. The whole number here 210.

## COLLECT. XXVIII.

*Medicus Absolutus.*

By *Everard Maynwaring*, M. D. 1668.

**L** *Angius* says, *Plures Empericorum temeritate, quam morbo aut Hostis Gladio interimi.* Epist. Dedicatoria. *Sunt enim Medici nomine multi re verò perpauci.* ibid.

Emperours and Kings have been Students in Physick, as *Gentius* King of *Illyricum*, *Attalus*, *Mithridates*, *Dionysius*; *Avicen* was è stirpe Regiâ, and wrote much in *Arabick*. 9.

*Joseph* in *Pharaoh's* Court had his Domestick Physicians, and when *Jacob* died he commanded 'em to Embalm his Father. 3.

The Art of Physick was long kept in its Infancy, and the Fame of it not great till the time of *Æsculapius*, *An. Mun.* 2242, the Son of *Apollo*, who first modell'd the Art by Precepts to his Sons *Podalirius* and *Machaon*. 9. After *Æsculapius* the Art did much decline till *Hippocrates* his time, who about the Year of the World 3538, did very much cultivate and promote it: he was a Descendant from *Æsculapius*, as some affirm; and the Art or Medical Skill was confined to his Line and Off-spring. 13.

After *Hippocrates* his time, came *Diocles*, *Chrysippus*,

*Erasistratus*, and about that time Physick was divided into *Diateticam*, *Pharmaceuticam*, & *Chirurgicam*. The Chymatrical or Medical Part of Physick is ascribed to *Hermes Trismegistus* (hence call'd *Ars Hermetica*,) who liv'd *An. Mundi* 2440; Contemporary with *Moses* in *Egypt*: and some think *Moses* skilled therein, and that by this Art he pulverized the Golden Calf. 25.

*Geber*, *Avicen*, *Albumazar*, *Haly*, *Rhasis*, writ of Chymistry in *Arabick*; *Olympiodorus*, *Zosimus*, *Democritus*, *Dardanus* in *Greek*; in *Latine*, *Raymund Lully*, *Arnoldus Villanovanus*, *Petrus Villanovanus*, *Aquinas*, *Paracelsus*, *Sendivogius*, *Van Helmont*, *Glauber*, &c.

*Galen* liv'd about 600 Years after *Hippocrates*, and practis'd at *Athens*, *Alexandria*, and *Rome*. 20. He and *Hippocrates* prepar'd their own Medicines, there were then no Apothecaries. 56.

Lost Health is restored either by Diætetical, Chyrurgical or Pharmaceutical Methods. 80.

*Hippocrates*, *Galen*, *Paracelsus*, *Libavius*, *Helmont*, &c. were all *Pharmacopœians*. 88.

Chymical and Galenick Medicines are often made of the same Ingredients, they differ only, *Præparationis modo*: It is a mistake to think that Chymical Pharmacy is confin'd to *Antimony* and *Mercury*; poysonous corrosive Minerals are of good use.

There are Chymical Medicines for all Inventions of Cure, Emetick, Cathartick, Diaphoretick, Diuretick, Cardiack, &c. *Rhubarb*, *Mechoacan*, *Cassia*, *Guajacum*, *Sassafras*, *Sarsaparilla*, *Bezoar-stone*, were all unknown to *Hippocrates* and *Galen*.

*Dr. Starky* was an excellent Chymist, died of the Plague 1665, and was an Acquaintance of the Author; all the Books he had in his Study, were *Van Helmont's Works*, and two or three small Books more. 135.

**Medi-**

Medicines are distinguish'd into Catholick, Specifick, and Appropriate.

A Catholick Medicine is that which is profitable in divers Diseases, fortifies the *Archeum*, and all the Faculties, and so is of general use. This doth not exclude the use of Specificks. It appears hence, that the Notion *Catholick*, is not to be understood absolutely, but *secundum Quid*.

A Specifick is that which is adapted for the Cure of one Disease only in all Persons.

The Appropriate is restrain'd for the Cure of one individual Person, design'd for his Case alone, and not fit for another, 139.

Nature hath many Ways to evacuate the Morbifick Matter, viz. *Per Vomitum*, *per Aluum*, *per Ductus urinarios*, *per Cutis Poros*.

There's no Medicine in the World that Cures all: *Optandum potius, quam sperandum tale Medicamentum*, says *Sennertus*. For then Providence wou'd be resisted, Sicknes slighted, Mortality baffled, &c.

Purging Medicines do not work *electivè*, by attracting this or that Humour, but they operate *excitativè*, *fermentativè*, & *abstersivè*, by exciting Expulsion, putting Nature upon fermentation and separation of the pure from the impure, and by stimulating abstersive Properties. There is no particular Purger for this or that Humour, Phlegm, Melancholy, Choler, &c.

Those Purgers, Senna, Agarick, Coloquintida, Hellebore, Rhubarb, Scammony, are of a deleterious virulent quality, and operate *per modum veneni*, 157.

Catholick Medicines are the Perfection of the Medicinal Art.

## COLLECT. XXIX.

*Vita Sana & Longa.*

By the same Author, 1670.

**H**Health and long Life are the two great desirable Enjoyments and Perfection of Humane Nature. In cold Climates Men are more longevous than in hot; for heat opens the Pores and causeth so great a Transpiration, as exsiccate and enervates the Body, &c. 3.

The Causes of the Abbreviation of Man's Life, are the different manner of his Living now from that of the Primitive Age. Hereditary and Transmissive Infirmities from Parents, Varieties and Excesses in Meats and Drinks, unnecessary Phlebotomy, virulent Purges, injurious Drugs, &c.

Good Air conduces much to Health.

*Temperie Cæli Corpusq; Animusq; juvatur. Ovid.*

*Plures Gula quam Gladius occidit.*

*Quo simplicior victus Ratio, eo melior.*

Of all Meats, Flesh is most sulphureous and nourishing. Next to a good Stomach, acid Sauces are the best.

Young tender Meats are of quicker digestion, and soon penetrated by the stomachical ferment. Meat moderately salted, is better than fresh, 62.

Vinegar and four Juices procure Appetite, and promote Digestion. Mustard, Mace, Ginger, Nutmeg, Pepper and Cloves, help a cold Stomach.

When

When you come to Meat, leave your Care and Business, call in your Friend, and be as merry as you can ; Mirth and Good Company help a dull Stomach. Eat not when you are hot ; Eat not hastily. Drink a little and oft at Meat. Hasty Motion and Labour soon after Meat vitiates Digestion. Omit a Meal sometimes ; it acuates, sharpens the Stomach, concocts indigested Matter, and makes the next Meal relish the better. Eat no late Suppers, &c. 65.

*Corpora impura quo plus nutries, eo magis lades. Hipp.*

*Similia similibus conservantur.*

*Omne frigus per se & pro viribus destruit.* Cold, according to the graduation of its Power, extinguisheth natural heat.

*Omne nimium Natura est inimicum.*

Exercise empties the Stomach, provokes expulsion of Excrements, opens the Pores, and gives a free Transpiration : *Nemo dum dormit alicujus est pretii, non magis quam si non viveret.*

Let your Bed be soft, but not to sink in, which sucks from the Body, exhausts and impairs Strength : A Quilt upon a Feather bed, is both easie and wholesome.

When you go to Bed, as you lay by your Clothes, so also lay aside your Business, Care and Thoughts.

*Natura est Morborum Medicatrix.*

The Sanguine Constitution is the best state of Body, the Phlegmatick, &c. are degenerate deficiencies and swervings from the integrity of Nature.

The Author believes, that there is a great difference of Souls in Divine and Moral Goodness,

So also in Natural Abilities and Integrity, relating to Health or Sicknes; so that many Defects and Irregularities in the Functions, Diseases and Decays of the Body, do assurge and arise from the Pravity and Debility of the Soul, by its lapsed Nature; and that the first Motions of the Soul, *ab intra*, are and may be infirm and vicious, when the Organs of the Body are in their rectitude and aptitude for regular Motions.

If the Mind be distemper'd, discompos'd, the Body cannot continue in health: The Soul and Body are so interwoven and conjunct in their Operations, that they act and suffer together; they are partners of each others ill and welfare, the one is not affected, but the other is drawn into consent.

Hence a morbus Body makes a drooping heavy Mind, and a disturbed Mind makes a healthy Body to decay and languish; so that all Dyscrasies and Diseases are not to be charg'd upon the Body, or want of rectitude in the Organs, 130.

The Soul is Agent, the Body Passive, and cannot act at all without energy and assistance from the Soul.

The Soul is incurious of the Welfare of the Body, and neglects the Oeconomy and due Regiment thereof by several ways.

1. When the Soul is carried away by some delightful Object, and then it deserts the Body, to pursue the Thing desired.

2. When the Soul is in fury, by the apprehension of some thing assaulting and disturbing, as in the Passions of Fear, Hatred, Anger, &c.

3. When it is heavy and unactive and melancholy, altogether neglective of the Polity and Regiment of the Body.

You



You cannot be angry, envious, or melancholy, but you cherish an Enemy that preys upon your Life.

Anger is an Inflammation of the whole Body, and were this Distemper to continue long, a Man were in as much danger of Life, as in the highest Feavor.

And therefore, *Principiis obsta*——  
——*Ne Frana Animo permittite calenti.* Stat.

*Quicquid Humana ope majus est,*  
*Diis permittite Curandum.* Symach.

Trouble not your self with too much Care : The Poet's Advice is sometimes good,

*Nunc Vino pellite Curas.* Hor.

*Nunc potemus lati jucunda confabulantes,*

*Qua vero post erunt, Diis sunt Cura.* Theog.

*Invidus alterius rebus marcescit opimis.* Hor.

*Tu ne Cede Malis, sed contra Audentior ito.*

Of Desire, the Poet says well,

*Quò non possum Corpore, mente feror.* Ovid.

Hope, Joy, and Mirth, are great Preservatives of Health and Strength : *Dum Fata sinunt, vivite lati.* Sen.

Medicines are either Curative, or Palliative ; the former respects the eradication and expulsion of the Morbifick Matter. These, viz. the latter, are design'd for procurement of refreshing Sleep, for sedation and allay of Pains, and to pacifie the *Ar-*  
*chans*, when furious and raging in any part of the Body, and to give Nature ease now and then,  
till

till the Morbifick Matter can be removed. These do not cure, but pacifie and assuage, 53.

'Tis a Canon, --- *Ubi desinit Physicus, ibi incipit Medicus*, 65.

Now Natural Philosophy is either Notional and Speculative, or Practical and Experimental. The Notional Way, the World hath too long insisted on, and at length seen its emptiness and vanity; and this growing out of date, the Experimental Philosophy is sought after, as the most likely to bring us a solid satisfactory Knowledge: And this Way the Royal Society laudably prosecutes.

This Philosophy and Knowledge is gain'd by Experiments and Tryals mechanically, because Man, since the lapse of *Adam*, knows not, *à Priori*, by an intuitive Knowledge; but *à Posteriori*, by Effects and Experiments. Now Medical Knowledge is a particular part of the general Knowledge of Nature, or a Specification and Reduction of it to serve only the purposes of confirming Health possessed, or regaining of it lost.

The Mode and Custom of Prescription is a Nurse to Ignorance, a late Innovation of bad Consequents to this Art, the Professors, and the Sick.

'Tis certain, that Pharmacy or Medicinal Preparation is the proper Business of a Physician: And the true Knowledge of Medicines is not gain'd, but by Manual Operations and Tryals, 68.

Traditional Medicines in Authors are known to be fallacious: The *Adepti*, or compleat Operators in Pharmacy, will affirm it, 101.

Of the Medicinal Drugs imported into *England*, a fourth part is more fit for the Dunghil, than to come into the Body of Man; and he that takes a Medicine of that sort, needs no other Disease.

Ano-

Another fourth, tho' not damnifi'd and corrupt, yet is weak, of small vertue, a degenerate sort; those are made up in Medicine and sold off: and thus the World and the Sick are cheated.

*Quercetan* upon this Question, *An Medicum deceat casuanoποιεῖν*; determines severely, and reproves those Physicians that reject the Preparing of Medicines.

*Some more Remarkables out of Gassendus.*

Vid. 52, & 147.

The Parts of *Astronomy* are two; the one is call'd, *The Doctrin of the Sphere*; the other, *The Doctrin of the Planets*, or, *The Theory of the Planets*.

The first respects the Diurnal Motion of the Moveable Heavens, and the Material Sphere is invented to explicate that Motion. The second explicates the Periodical or second Motion of the second Moveables.

For the salving of those *Phænomena's* there are two *Hypotheses*, the one supposes the Rest of the Earth, i. e. the *Ptolemaick*, which explicates the Theory of the Planets by *Excentricks* and *Epicicles*; the other, the Motion of the Earth, to wit, the *Copernican*.

*Of Circles not express'd in the Globe.*

The *Azimuths*, or Vertical Circles, pass through the *Zenith* and *Nadyr*, and cut the Horizon in right Angles. Circles of Altitude, or *Almicanters*, are parallel to the Horizon. There are also Circles of Distance, and of Position.

A Star is said to rise cosmically, when it rises with the Sun. Again, if when the Sun rises, a certain

tain Star sets or descends under the Horizon, that Star is said to set Cosmically : So *Taurus* rises Cosmically in April, rising with the Sun, the Sun being then in that sign ; hence *Virgil*,

*Candidus Auratis aperit cum cornibus Annum, 42.*  
Taurus.

An Acronick rising of a Star is if the Star rises when the Sun is setting. And on the contrary, if a Star sets with the Sun setting, 'tis called an Acronick setting.

A Star is said to set heliacally, when it is immerfed in the Sun's Rays, or become inconspicuous by reason of the Splendor and Vicinity of the Sun.

And 'tis said to rise heliacally, when it becomes again conspicuous by reason of its Emerfion out of the Light and Splendor of the Sun, and its diftance from it.

The Moon doth heliacally set in the Morning, and heliacally rise in the Evening ; and the reason is, because its periodical Motion through the *Zodiack* is fwifter than the Suns, and fo it overtakes the Sun in the Morning, and forfakes him in the Evening.

And the reason why other Stars set in the Evening and rise in the Morning heliacally is, because the Sun's motion through the *Zodiack*, or in *Confequentia*, is fwifter than theirs : hence the Sun's Splendor does overtake them in the Evening, and forfake them in the Morning. And this is the case of the fixed Stars, and the three Superior Planets, *Saturn*, *Jupiter*, *Mars*.

The Poets celebrate chiefly the heliacal setting and rising of the fixed Stars : So *Ovid* hints the setting of the Dolphin, when the Sun runs through the sign *Capricorn*. *Quem*

*Quem modo calatum Stellis Delphina videbas,  
Is Fugiet visus nocte sequente tuos.*

So the same Author intimates the heliacal rise of *Aquarius*, when the Sun is entering *Pisces*,

*Jam levis obliquâ subsedit Aquarius urnâ,  
Proximus aethereos excipe Piscis Equos.*

I said before the superior Planets, for the two inferior, *Venus* and *Mercury*, do sometimes rise heliacally in the Morning, and set in the Evening; and sometimes rise in the Evening, and set in the Morning.

The reason is, because they circulate about the Sun, and do not always move in *Autumn*, but sometimes make a Regression towards the *West*. *Vide 44.*

The Artificial Days increase and decrease unequally because of the Obliquity of the *Zodiack*. about the *Equinox* the Days do sensibly increase or decrease, because then the Diurnal-Arch is much amplifi'd or contracted; but not so about the *Solstice*.

An hour is that space of time where in 15 degrees of the *Equator*, and a little more does pass by the *Meridian*. There are 24 Climates and 48 Parallels, the Climates end in the Polarcircles. See p. 147.

**COLLECT.**

## COLLECT. XXX.

*Some Letters containing an Account of what seem'd most Remarkable in Switzerland, Italy, &c.*

By G. Burnet, D. D. 1686.

**T**He Chamber of Corn in *Geneva* has always two Years Provision for the City in store, and forces none but the Bakers and Publick-houses to Buy of it at a taxed Price. 7.

The Hill *Maudit*, not far from *Geneva*, of which one third is always covered with Snow, is two Miles of perpendicular height, according to the Observation of that great Mathematician *Nicholas Fatio Duilier*, who at two and twenty Years of Age is already one of the Greatest Men of his Age, and seems to be born to carry Learning some Sizes beyond what it has yet attained. 14.

In the Canton of *Bern*, and thereabout, the third Adultery is punish'd with Death; and so is the fifth Act of Fornication. The Author saw one Woman executed upon this Account. 20.

At *Bern* upon a General Summons, they can make an Army of 80000. 21.

In the two Cantons *Apenzel* and *Glaris*, both Religions are tolerated, that in the same Church they have both Mass and Sermon; on one *Sunday* the Mass begins, and the Sermon follows, and the next *Sunday*, *vice versa*. 27.

*Switzerland* tho' a poorer Country than *France* and *Italy*, is yet a great deal richer and much more inhabited: *Italy* is almost quite dispeopled, and so is *France* in great measure, and the People in both reduced

reduced to a poverty that appears in all the marks in which it can shew itself, both in their Houses, Furniture, Cloaths and Looks. 42.

In *Soloturn*, in one of the Popish Cantons, about the *Alpes* they express an Heat and Bigotry beyond what is to be found in *France* and *Italy*; before they come within the Church-Doors, they kneel down in the Streets, when Mass is saying in it. In the Chief Church of *Soloturn*, there is an Image of God the Father, as an old Man with a Great black Beard, having our Saviour on his knees, and a Pigeon over his Head.

Here also begins a Devotion at the *Ave-Mary-Bell*, which is scarce known in *France*, but is practis'd all *Italy* over. At Noon and at Sun-set, the Bell rings, and all say the *Ave-Mary*, and a short Prayer to the Virgin.

But whereas in *Italy*, they only put off their Hats; in *Switzerland*, they do for the most part kneel down in the Streets, which I saw no where in *Italy* but at *Venice*, and there it is not commonly done. 44. *Baden*, one of the Cantons is the first that receiv'd the Reformation. They say, that this can bring 50000 Men together upon Twenty four hours warning. 47.

In *Zurich* the Women do not familiarly converse with Men, unless they be their Kindred. In the Streets they make no returns to the Civilities of Strangers; and none but Strangers take off their Hats to Women there, but they make no Courtesies.

And here, as in all *Switzerland*, Women are not saluted, but the Civility is expressed by taking them by the hand. 48.

In *Geneva*, and all *Switzerland* over, there are daily Sermons, which were substituted upon the Reformation, to the Mass. 49. The

The Bishops in Queen *Elizabeth's* Days preserv'd the Vestments and Habits of the Clergy rather in compliance with the Queen's Inclinations, than out of any Liking to them, as appears from *Jewel's* Letter, 8 Feb. 1568. And in January the same Year *Sands* writes to the same purpose, *Contenditur de Vestibus Papisticis utendis vel non utendis, dabit Deus his quoq; finem.* So Bishop *Hörn*, *Cranmer*, and *Ridley* disliked 'em also, &c. 51.

All the Bridges in *Lombardy* are naked and without Rails, though some of 'em are very long and high, which seems dangerous to Travellers: but seldom any Mischief follows on it, for those are sober Countries where Drinking is not much in use. 63.

The Massacre in the *Valtoline* destroyed many hundreds of Protestants. 81. In all the Churches of *Switzerland* and the *Grisons* the Ministers preach cover'd, save at *Coire*, where, i. e. at *Coire*, the Ministers express a particular Devotion in saying the Lord's Prayer, for those who wear Caps put 'em off when this is said. 85.

Not far from *Coire* there is a Way call'd, *Via Mala*, and that very justly.

At *Chavennes* there's one sort of Grape that is bigger than any *Damascene* Plum that we have in *England*. 93. Here and at the *Valtoline* there's a sort of Wine called Aromatick Wine, it tastes like Strong-water drawn off Spices, its strength is equal to a weak Brandy: they have it forty Year old, one can hardly drink above a spoonful. 94.

Here also their Pots to boyl their Meat are made of Stone, and so almost all *Lombardy* over: one of those Pots takes heat and boyls sooner than any Pot of Mettle. They are twice as thick as a Pot of Mettle; it never cracks, and gives no tast to the Liquor. 95. The



The River *Tesine* runs with such force that a Man may go thirty Miles in three Hours with one Rower. 104. The Libraries almost all *Italy* over are but scandalous poor things, meanly furnished. And the Ignorance of their Priests, both Regular and Secular, is almost incredible. 108.

There is scarce one House in ten that hath Glass in their Windows in *Milan*, so that one is either exposed to the Air, or shut up in a Dungeon: The same Defect is in *Florence*, besides all the small Towns in *Italy*, which is an effect of their Poverty; for what by the Oppression of their Government, and of the no-less Squeezing and Oppression of their Priests, the People are reduced to extream Poverty. 115. Near *Verona*, in so brave a Country, there is a Heath 7 or 8 Miles long. 121.

In *Verona* there is an Amphitheatre, one of the least of all the *Romans* built, but the best preserved; it can hold 23000 Persons *ibid.*

All the Cattle of *Italy* are grey or white; and all their Hogs are black, except in some places, where they are red. Hogs-Flesh in *Italy* is much better than in *France* or *England*; the Husks of the pressed Grapes is a mighty nourishment to 'em. 123. A *French* Papist told the Author, that he cou'd hardly bear the Religion of *Italy*, the Idolatry of it was so gross. 124.

In 1685 there was a young Woman in *Venice* that spake five Tongues well, whereof *Latine* and *Greek* were two: she pass'd Doctor of Physick at *Padua*; but what was beyond all, she was a Person of great Vertue and Piety. 135.

All the Ways in *Tuscany* are very rugged, save in some places. The *Italians* are poor and not industrious; it will amaze a Stranger to see in their little Towns the whole Men of the Town walking in

the Market-places in their torn Cloaks, and doing nothing: And all their Inns are generally poor, and the Rooms and Beds so bad, that our Footmen in *England* wou'd much disgust 'em. 192.

The new Method of *Molino's* prevails so much in *Naples*, that he hath about 20000 Followers in that City; he is a *Spanish* Priest, writ a Book intituled, *Il Guida Spirituale*; which is a short Abstract of the Mystical Divinity; the Substance of the whole is reduced to this, That in our Devotions, the best Methods are to retire the Mind from all gross Images, and so to form an Act of Faith, and thereby to present ourselves before God; and then to sink into a Silence and Cessation of new Acts, and to let God act upon us, and so to follow his Conduct. This way he prefers to the Multiplication of many new Acts, and different Forms of Devotion; he makes small account of Corporal Austerities, and reduces all the Exercises of Religion to this Simplicity of Mind. He is much supported in *Naples* and *Sicily*, and hath many Friends at *Rome*; the Pope has a great Opinion of *Molino's* Sanctity: but upon the Complaint of a Great King, some Cardinals, and the Jesuits, he and some others are clapt in the Inquisition; but they are well used. His Doctrine is chiefly, That Men ought to bring their Minds to a state of Inward Quietness; from which the name of Quietists was given to all his Followers. 197.

When the Laws of the twelve Tables were made, 'tis certain Sepulture was then in use: and though Burning came to be in use among the *Romans*, yet they return'd to Sepulture again, before *Constantine's* time; so that 'twas not the Christians produced this Change. The Modern Criticks all affirm, That Burying began in the times of the *Antonines*. The  
Hea-

Heathens left Burning of their own accord. 208.

In the Way from *Puzzoli* to *Naples*, is the Grot or Cave of *Pausalippe*, 440 Paces long, 20 Foot broad, and about 20 high; 'tis part of the Road from *Puzzoli* to *Naples*. 215.

Near this place there is a strange Boiling under ground, and another little Grot that sends out a poysonous Steam, that as it puts out a Candle, so it kills any living Creature within a Minute of Time, in half that time a Dog fell into a Convulsion; and the Experiment being commonly made by Dogs, this place is call'd, *Grotto di Cane*. Here are *Cicero's* and *Virgil's* Houses, for which there's nothing but a dubious Tradition; they are Brick-Buildings of the *Roman* way. But of all the Scenes of Noble Objects in the Bay of *Puzzoli*, the Rests of *Caligula's* Bridge are most amazing, there are yet eight or ten of the Pillars that supported the Arches standing, they are made of Brick; a Bridge made over a Sea three or four Miles broad, the Water about nine or ten Fathom deep. *Vide* 310. So deep that one can scarce imagine how 'twas possible to build in such a depth, and for the carrying off the Sea, that yet seems more impossible.

The Cave call'd *Centum Camera*, is here also. 218.

Here about is the *Via Appia*, a Causey thirty Miles long, twelve Foot broad, made of huge Stones, most of 'em blue, design'd for a Foot-way; a Causey that has lasted above eighteen hundred Years. 220.

*Rome* has more curious Things to entertain the Attention of a Traveller, than any other Place in *Europe*: In the Entrance to it on the side of *Tuscany*, the Remains of the *Via Flaminia* (which is not indeed so entire as the *Via Appia*,) yet is such as

will raise in a Traveller a just Idea of the *Roman* Greatness, who laid such Causeways all *Italy* over.

In *Italy* the Churches, Covents, and Palaces are very magnificent, but the other Buildings very mean, which discovers the Misery under which the *Romans* groan. 222.

*St. Peter's* alone wou'd make a big Book ; the Church itself is of a vast height, and yet the Cupulo rises 415 big Steps above the Roof of the Church; in the height of the Concave of this Cupulo the Divinity is pictur'd as an old Man, compass'd about with Angels. The Palace adjoining is adorned with the Painting of *Raphael* and *Michael Angelo*. 223.

In the Appartments of *Rome* the Doors are generally mean, and the Locks meaner, 224. excepting some Palaces.

There the Flooring of the Palaces is all of Brick, which looks very mean and disproportionate to the costliness & magnificence of other parts o'th' room. They say the Air is so cold and moist in Winter, that they cannot pave with Marble ; and the heat in Summer will crack Flooring of Wood, and breed Vermin that wou'd eat it up. 224. The Appartments in their Palaces wherein they lodge are hang'd with Red Velvet or Damask, with a Gold Gallow at every Breadth of the Stuff, and a Gold Fringe at top and bottom.

In the Vatican there is room for more new Books than the World will ever produce.

The *Heidelberg*-Library stands by itself, and fills one side of the Gallery, as the Duke of *Urban's* Library of Manuscripts filleth the other. 226.

The *Romans* have generally a Contempt of the present Pontificate or Pope: sure his Life is very innocent, his Polity good ; no Publick Vices to be seen

seen now at *Rome*; his Sobriety singular; the Expence of his Table doth not amount to a Crown a day; he's careful of his Health, keeps his Bed upon the least indisposition; but his Government severe, and his Subjects ruin'd. 223.

The Conversation of *Rome* is much upon News, tho' there is no News Printed there. The Queen of *Sweden* now, is the chief of all the living Rarities that one sees in *Rome*; her civility to Strangers, to all, unspeakable: 'Twas said by herself. That she now grows to be one of the Antiquities of *Rome*, 236.

In the Gallery of the *English* Martyrs, *Garnet's* Picture is not to be found; yet *Oldcorn* is hung there, tho' convicted of the Gun-Powder Treason, as the other also was.

Near *Rome* there were two Nuns that chang'd their Sex and grew Men, 246.

At *Geneva* there's a Minister of *St. Gervais*, Mr. *Gody*, who has a Daughter now 16 Years old. Her Nurse was very deafish, and at two Years of Age the Child was quite deaf. This Child since, by observation of the Motions of the Mouths and Lips of others, hath acquir'd a sort of Jargon, in which she converses with those that understand her Language. She knows nothing that's said to her in the dark. In the Night, when 'tis necessary to speak to her, they must light a Candle. And even in the Night, by laying her Hand on her Sister's Mouth, with whom she has practis'd her Language, she can perceive by that, what she says, 248.

There were no Publick Rejoycings, or *Te Deum's* sung at *Rome*, for the Proceedings in *France* against the Protestants; and many Papists there seem to dislike the Conversion by Dragoons: Some

Cardinals dislik'd it. Some Protestants think the French King is not to be so much blam'd, as his Religion is, which obligeth him to extirpate Hereticks, 256.

In *Basil*, the Clocks always, since the Council was held, anticipate the time a full Hour: And, they say, that in order to the advancing of the Business, and shortning of their Sessions, they order'd their Clocks to be set forward an Hour, which continueth to this day, 264.

*Holben*, a Native of *Basil*, was an excellent Painter, and has left excellent Monuments of his Pencil behind him. There is in *Basil* a Gunsmith, that maketh Wind-Guns: He shew'd the Author one, that as it receiv'd Air at once for ten Shot, so it had this peculiar to it, that he can discharge all the Air, that can be parcell'd out in ten Shot at once, to give a home Blow. Those are terrible Instruments, since they can assassinate Persons so dexterously, that neither Noise nor Fire will discover from what Hand the Blow cometh, 265.

Among the Manuscripts in *Basil*, the Author saw four of *Huss's* Letters that he writ to the *Bohemians*, the day before his death, which are very devout, but excessively simple, 266.

The *Lutherans* retain their Animosities almost to an equal degree both against *Papists* and *Calvinists*. In their singing of *Psalms*, it is left free to keep on, or put off their Hats, which seems irreverent. Their Churches full of Pictures, but no religious Deference paid 'em. They bow when they name the Holy Ghost, as well as at the Name of Jesus, 273.

A few days before the Author left *Geneva*, a poor Labourer was carry'd off by a strange sort of Death; the Foot of one of his Cattel, as he was plough-

ploughing, went into a Nest of Wasps, upon which the whole Swarm came out and set upon him, and kill'd him in a little time : His Body was prodigiously swollen with the Poison of their Stings, 290.

At *Geneva* every Inhabitant may buy his own Corn as he pleases, only Publick Houses must buy from the Chamber.

At *Rome* the Pope buys in all the Corn of the Patrimony, for none of the Landlords can sell it, either to Merchants or Bakers. In selling this out, the Measure is lessened a fifth part, and the Price of the whole is doubled ; whereas in *Geneva* the Measure by which they buy and sell is the same, 7.

The Inns in *Italy* are extream wretched for Lodging and Diet : This is the Plague of all *Italy*, when once one hath passed the *Appennis*, excepting the great Towns, one really suffers so much that way, that the pleasure of Travelling is much abated, by the inconvenience that one meets in every Stage through which he passeth.

Cardinal *Howard* still retains all the Sweetness and Gentleness of Temper that we saw in him in *England*, and he keeps the unaffected Simplicity and Humility of a Frier, amidst all the Dignity of the Purple ; the elevation of his present Condition, hath not in the least chang'd him, 231.

That this Book is dedicated to the Honourable *Robert Boyle*, Esq; , is collectible from *Page* 251.

Between *Rome* and *Naples* it is ill Travelling, the Lodging and Wine is intolerable, the Bread ill baked, no Victuals, except Pidgeons, and the Oil is rotten.

If the Kingdom of *Naples* were divided into five parts, it wou'd be found, upon a strict survey, that the Church-men had four parts of the five ; which one made out thus : They have in Soil above

half of the whole, which is two and a half; and in Tythes, and Gifts and Legacies, they have one and a half more: For no Man dieth without leaving a Legacy to some Church or Convent, 192.

In a word, what upon the account of the Peoples indisposition to Labour, the severity of the Government, and the vast dead Wealth, that is in the hands of the Church-men, the *Italians* are one of the poorest Nations in *Europe*, 192.

### COLLECT. XXXI.

*An Epitome of Navigation*, by Henry Gellibrand, 1680.

**N**avigation is distinguish'd into three Sorts, Plain Sailing, *Mercator's* Sailing, and Circular Sailing, or Sailing by the Arch of a great Circle.

Plain Sailing, or Sailing by the Plain Chart, is the plainest, and the Foundation of all the rest; and near the *Æquinoctial* there is need of no other to be used, because there the Degrees of Longitude, as well as the Degrees of Latitude, are all equal, each Degree being divided into 60 Minutes, or Miles, tho' they are somewhat more than *English* Miles, each Minute or Mile containing about 6000 Feet.

In this Art the Seaman hath these Helps:

First, He hath his Compass to direct him which way he goes, which is divided into four Cardinal Points, or Quarters, East, West, North, South; and each of these is divided into 8 equal Parts, called Rumbs, or Rhombs, making in all 32 Points; so that steering by the Compass, well made and duly



duly rectified, the Seaman always knows which way he sails, to a very small matter.

The Second Help the Seaman hath in keeping his Account, is a careful Observation (by the Log-line, or some other good way) how many Miles or Leagues he sails every Hour, and so every Watch, and every Day.

The Third Help is the Knowledge and Observation of the Latitude, both of the Place from whence he sails, and where he is arrived, or whither he is to sail.

And out of these three Things, by the Doctrine of Plain Triangles, he comes to know all that is necessary for the keeping of his Account; so that he may know at any time where he is, how far he hath sailed, and how far he is yet to sail, and which Way, or upon what Point of the Compass, he is to steer; and all this by Plain Rules of Right-lined Rectangular Triangles.

## COLLECT. XXXII.

### *Some other Remarkables Astronomical.*

**A**N Astronomical, Natural Day, is a Space of Time, wherein an entire Revolution of the Æquator is absolved, together with a Portion of the Æquator correspondent to that Portion of the Ecliptick, which the Sun in the mean time runs through.

For if the Sun did not move through the Ecliptick, and return to the Meridian with the same Point of the Æquator, with which he departed from the Meridian, then one entire Revolution of the Æquator wou'd be the precise Standard and Mea-

Measure of a Day. But because the Sun does move daily almost one Degree towards the East, hence it comes to pass, that the Point of the Æquator, when the Sun departed from the Meridian, returning to the Meridian, the Sun doth not yet return, but with one Degree almost after.

I say almost, for partly, by reason of the Obliquity of the Zodiack, and partly the Excentricity, sometimes more, and sometimes less than one Degree is to be added, and this produceth a certain inequality of Days.

The Sun in his ordinary Motion runs every Day 59 Minutes and  $\frac{1}{2}$  of the Ecliptick, but sometimes he runs almost two Minutes more, sometimes two Minutes less, almost.

*De Anno*, a Year, is either Astronomical, or Civil; the Civil, either Solar, or Lunar; the Astronomical Year, is either *Vertens*, or *Sidereus*.

The *Annus Vertens*, is that Space wherein the Sun going from one Point of the Ecliptick returns to it again, and contains 365 Days, and 5 Hours, and almost 49 Minutes.

The *Annus Sidereus*, is that Space of Time wherein the Sun going from a certain Star, returns to it again; and this Year is somewhat longer than the *Vertens*, by reason of the fixed Stars toward the East, but the difference is insensible.

Every fourth Year with us consists of 366 Days, because of the intercalation of a Day, which is made up of those almost four six Hours, that are reserved; this Intercalation is made, that the Æquinoxes and Solstices may be contained within the same Months and Days of the Months, and not excur or rove through all the Months and Days of the Year, as they did among the *Egyptians*, whose Year consisted of 365 Days, taking no notice of the odd almost six Hours. Every

Every fourth Year is call'd *Bissextile*, because when the Intercalation is made, that Day added being interpos'd between the 23<sup>d</sup> and 24<sup>th</sup> of *February*, it may be said in that Year twice, *Sexto Calendas Martii*.

I said before (almost) six Hours, because 11 Minutes almost are wanting; whence it appears, we add too much every *Bissextile*: and this makes the *Æquinoxes* and *Solstices* run back by degrees.

In the time of the *Nicene* Council, the Vernal *Æquinox* was about the 21<sup>th</sup> of *March*; in Pope *Gregory* the 13<sup>th</sup>'s time, 'twas observ'd to be on the 11<sup>th</sup> of the same Month; and therefore 10 days were suppress'd, and the 11<sup>th</sup> reckon'd for the 21<sup>th</sup>, that the *Æquinox* might return to the 21<sup>th</sup>.

This is call'd the Reformation of the Calender, or *Gregorian* Account, which reckons the *Æquinoxes* and other Times of the Year ten days before the Old or *Julian* Account.

The *Copernican* Hypotheses puts the Sun in the center of the Universe, then *Mercury*, *Venus*; next the Earth and Moon, *Mars*, *Jupiter*, *Saturn*; then the fixed Stars.

*Tycho Brahe* places the Earth in the center, the Moon and Sun concentrical to the Earth, and the fixed Stars also; *Mercury*, *Venus*, *Mars*, *Jupiter*, *Saturn*, move concentrical to the Sun.

F I N I S.

A N

---

A N  
APPENDIX,

CONTAINING

Short but very Profitable and Delightful Rules  
and Instructions in many Parts of the Ma-  
thematicallys.

---

I. *Of Multiplication.*

I. **W**hen a Number proposed hath one or more  
Cyphers to the right hand, the Operation  
may be contracted thus: Cut off the Cyphers by a  
Line, and multiply the significant Figures, adding  
the Cyphers to the right hand of the Product.

2. The Product of any Number by 10 may be  
found by adding a Cypher to the Multiplicand, by  
a 100, by adding two Cyphers, &c.

II. *The Method of Working the Rule of Three direct, is  
taught in this Versicle, Duc medium in Ternum,  
& productum: divide Primo,*

The Rule of Three direct, is when more requires  
more, or less requires less.

The Golden Rule reverse, is when in the third  
Number more does require less, or less require  
more.

Here the way of Operation is, Multiply the first  
by the second, and divide by the third, and it will  
quote

quote the fourth proportional Number, which (as in the Rule direct) shall be of the same Denomination with the second Number.

### III. *To work the Rule of Fellowship.*

Say, If the whole Stock produce so much Profit or Loss, then what gives the first Man's part of the Stock? and so correspondently of the rest.

### IV. *The Rule of Falshood is more curious than useful.*

To reduce ordinary Fractions into Decimals, multiply the Numerator, or the Number above the Line, by 100 or 1000 and divide the Product by the Denominator or the Number under the Line, and it quotes the Numerator of the Decimal-Fraction.

### V. *In working Division, observe,*

1. If you cannot take your Divisor out of the Figures of the Dividend, under which they stand, you must then remove your Divisor one place more forward, and for the same put a Cypher in the Quotient. And so also you must do at the end of the Quotient, when you have a Cypher or Cyphers in the end of the Dividend, which your Divisor will not reach.

2. If you divide by any Divisor that hath Cyphers to the Right-hand, as if you divide by 10, cut off the last Figure of the Dividend towards the Right-hand, and the rest of the Figures are the Quotient. To divide by a 100, cut off two of the last Figures, by a 1000 three, &c.

To divide by 20, cut off the last Figure, and take the half of the remainder. The same Reasons hold

hold if you divide by 30, cut off the last Figure, and take the third part, if by 40, the fourth, &c. The remaining Fraction being always the parts of its respective Integer.

3. Multiplication is prov'd by Division : divide the Product by the Multiplier, and if the Operation be right, the Quotient will be equal to the Multiplcand.

4. To prove your Division, Multiply the Quotient by the Divisor, and add the remainder, if any be; then if the Product be the same with your Dividend, your work is right. Otherwise not.

5. To Multiply by Logarithms is to add one Logarithm to another; and the Product is the Logarithm of the third Number you require.

6. To Divide, is to Subtract one Logarithm from another, I mean the Lesser from the Greater, and the remainder is the Logarithm of the Number sought for.

7. To Work the Rule of Three by Logarithms, take the Complement Arithmetical of the Logarithm of the first Number, and add to it the Correspondent Logarithms of the other Numbers, and you have the Logarithm of the fourth, casting away Radius.

## VI. Of Instrumental Arithmetick.

1. To Multiply : Extend the Compasses upon the Line of Numbers, from 1. to the Multiplier, and the same extent, the same way, will reach from the Multiplcand to the Product required.

2. To Divide : Extend your Compasses upon the Line of Numbers, from the Divisor to One; this done, if you apply the same Extent, the same way from the Dividend, it will fall upon the Quotient.

3. To

3. To extract the Square-Root, is the same as to find a mean Proportional betwixt 1. and the Number given; therefore divide the said distance betwixt 1. and the Number given, into two equal parts, and at that point you will find the Square-Root; so the middle distance betwixt 1. and 9. you will find to be at 3. which is the Square-Root of 9.

4. To extract the Cube-Root, is to find two mean Proportionals, betwixt the Number given and 1. therefore upon the Line of Numbers divide the distance betwixt the Number given and 1. into three equal parts, and the first of those three parts from 1. is the Cube-Root.

To extract the Square and Cube-Root by Logarithms, see Page 7.

## VII. Of Decimal Fractions.

1. The Denominator of a Decimal Fraction is implied. The Numerator of a Decimal always contains one place less than the Denominator.

2. The Denominator of a Decimal, is a Number consisting of a certain Number of Tens encreasing in a Geometrical Proportion, the Value of which is exhibited by a Point (with Cyphers, if need be) prefixed to the Numerator. Thus  $\frac{5}{10}$  is expressed in this manner,  $,5 \mid \frac{5}{10}$  thus,  $,05$ . and  $\frac{35}{1000}$  thus,  $,035$ .

Note, As whole Numbers encrease by ten times, from Unites to the left-hand; so Decimals decrease in the same proportion, from Unites to the right-hand.

VIII. *Of the Addition and Subtraction of Decimals.*

The Operation differs in nothing from the same Work in Whole Numbers, only observe, That (if there be Whole Numbers prefixed to one or more of the Decimal Numbers given to be added, or subtracted, and you carry or borrow one or more Tens from the place of Primes) you add or subtract the Tens so carri'd or borrow'd to or from the place of Unites in the whole Number.

IX. *Of the Multiplication of Decimals.*

You must proceed to find the Product, as you do in Whole Numbers, cutting off as many places of the Product to the right-hand, as there are of Figures in the Fractional part of both the Factors, so are the Figures to the left-hand Integers, and the Figures cut off the Decimal parts of an Integer.

X. *To Extract and Square the Cube-Root by Logarithms.*

1. Take half the Logarithm of the Number given, and that is the full Logarithm of the Square-Root.

2. To Extract the Cube-Root, Take the third part of the Logarithm of the Number given, and that will be the Logarithm of the Cube-Root.

XI. *To find a Mean Proportional between two Extream Numbers given.*

Add the Logarithms of the two Extream Numbers together, the half of the Sum shall be the Logarithm



garithm of the mean Proportional required.

## XII. Of Planimetrie.

1. To Measure the Area of right-angled Triangles, Multiply the whole Base by half the Perpendicular, or the whole Perpendicular by half the Base.

2. The Area of a Square, is found by squaring or multiplying one of the sides by it self.

3. The Capacity of the Oblong, by multiplying the two sides, including the same Angle one by the other.

4. Oblique Triangles and irregular Polygons, may be measured by raising Perpendiculars, and reducing them to right-angled Triangles.

5. To investigate the Superficial Content of a Circle, Multiply half the Diameter by half the Circumference, and you obtain their end ; or else square the Diameter, and then say by the Rule of Three, As 14 is to 11, so is the Square to the Area.

6. To find the Superficial Content of a Globe, first find the Area of a Circle of equal Diameter, and then multiply that by 4 ; the Product is the Superficial Content of the Globe.

## XIII. Of Stereometrie.

1. To find the Solid Content of a Globe, Multiply the Superficial Content by the sixth part of the Diameter, the result shall be the Solid Content of the Sphere.

2. Of a Solid Square, Multiply the Superficial Content of one of the flat Squares by the Depth, and the Product gives the Solid Content in

I

Cube.

Cube-Inches, or other Measures you work by.

The same Method holds for the Mensuration of a Parallelipedum-Beam, &c.

3. To Measure the Capacity of a Cylinder, Multiply the Area of the Base by the Longitude of the Cylinder.

4. Of Pyramids and Cones, Multiply the Base by the third part of the Perpendicular.

#### XIV. *To Protract an Angle by the Line of Right Lines.*

Work by 30 Degrees for your Radius, and by half the Angle you propose to draw.

#### XV. *Of Gauging.*

1. To Measure a Vessel of a Cylindrical form, Take the Area of the Base or Bottom, and that Product multiply'd by the Depth, gives the Solid Content in Cubick Inches, which you may reduce into Ale-Gallons, by dividing the same by 282; into Wine by 231; and for Corn-Gallons by  $272\frac{1}{4}$ , and the Quotient of each is the Gallons.

2. To Gauge a Barrel, Hogshead, &c. whose Staves are curve and not streight: Add double the Bung-Diameter to once the Head-Diameter, and divide their Sum by 3, the Quotient take for their Mean-Diameter, then multiply the Area of that Circle by the depth of the Vessel, and divide the Product by 282 for the Ale-Gallons, for so many solid Inches it contains.

#### XVI. *Of the Gauging-Rule.*

1. There are two Lines thereon, called Diagonal, the one for Ale, the other for Wine-measure; put

put the end which is cut slope-ways in at the Bung-hole, and let it touch the bottom of the Head, and the Number at the Bung shews the Ale or Wine-Gallons respectively. This will give a very good Estimate of the Content of all Casks in the form of a *London Beer-Barrel*.

2. On another side you have *Gunter's* Logarithmick-Line; at 17, 2. stands the Gauge-Point for Wine-Gallons, mark'd *W. G.* and at almost 19, the Gauge-Point for Ale-Gallons, mark'd *A. G.*

To Gauge a Cask by this Line, find the Mean-Diameter by the Rule above; add double the Bung-Diameter to once the Head-Diameter, &c. and find also the Cask's Length by the Line of Inches; then with your Compasses set one Foot in the Gauge-Point, whether it be for Wine or Ale, and extend the other to the Mean-Diameter, upon your Line of Numbers, and keeping the Points at that distance, set one Foot at the Number, expressing the Cask's Length; and from thence, double the distance of the Feet of the Compasses, exhibits the Content in Ale or Wine-Gallons respectively.

#### XVII. To Square a Circle.

Divide the Circle into four equal parts by two cross Diameters, next divide the Semi-Diameter into four equal parts, and add one of those parts to all the Semi-Diameters, and then drawing Sides to the Extrems of them, you have the Quadrature of the Circle given, true Mechanically at least, although not exactly Geometrically.

XVIII. *To find a Right Line equal to a Circumference given.*

Divide the upper Semicircle into halves, and the lower Semicircle into three equal parts, then draw two Lines from the middle Point of the upper Semicircle, to your two Points or Marks in the lower Semicircle ; next take in your Compasses the distance between the two Lines at the Diameter, and set it off from the Diameter on one of the Lines in the lower Semicircle, and mark it ; and the length from that Mark, to the middle Point of the upper Semicircle, is a very little more than the length of the Quadrant ; and four times that Extent will be a little more than the whole Circumference.

XIX. *Another Way to find the Solid Content of a Globe or Spherical Body.*

The Analogy is, as 21 is to 11, so is the Cube of the Diameter of any Round Body to the Solid Content of the same.

XX. *Of the Proportion of Metals in Weight.*

Iron is to Lead, as 2 to 3 ; Lead is to Stone, as 4 to 1 ; it is meant of a hard Marble-stone, fit for Bullets ; Iron is to Stone, as 8 to 3 ; Lead is to Brass, as 24 to 19 : More exactly thus, Suppose a Cube or Bullet of Gold, of a certain Diameter to weigh 100 l. Weight, the like of any of these Metals shall weigh as followeth :

*Gold,*

(3117)

	l.	pts		l.	pts
Gold,	100	00	Brass,	47	37
Quicksilver,	71	43	Iron,	42	10
Lead,	60	53	Tin,	38	95
Silver,	54	39	Stone,	15	80
Water,	5	68			

**XXI. To find the Golden Number.**

Add 1 to the Year of our Lord, and divide that Sum by 19, the remainder is the Prime that Year.

**XXII. To find the Moon's Age.**

Add the Day of the Month, the Months from March and the Epact for the Year together, and the Sum is the Moon's Age; if it be less than 30, if more, reject 30, and the remainder is the Moon's Age.

**XXIII. To find what Year it is from Leap-Year.**

Divide the Year of our Lord by 4, and the remainder is the Year sought.

**XXIV. To find what Day of the Week the first of March falls on.**

This Dystich is instructive, made by Mr. Norwood.

Sum of the Year, one fourth and two,

Divide by seven, the rest count you.

**XXV. Any three Pricks given, not being in a straight Line, to find a Center whose Circle shall pass through them.**

Reduce the three Pricks to a Triangle, divide any two sides thereof into two equal parts, by two Perpendiculars, and where the Perpendiculars intersect, there is the Center.

**XXVI. To find the Latitude of a Place.**

If the Sun hath North Declination, then subtract

ſtraſt the Declination out of the Meridian Altitude, and the remainder ſhall be the height of the *Æquinoctial* : But if the Sun hath South Declination, then add the Declination to the Meridian Altitude, ſo ſhall the Sum of them give the Altitude of the *Æquinoctial*, which being taken out of the Quadrant of 90 Degrees, leaveth the Latitude of your Place.

The Height of the *Æquinoctial* is the Complement of Latitude.

**XXVII.** *To know what a Clock it is in any Place.*

Obſerve, Thoſe places to the Eaſtward of us have their Day begin ſooner than ours, and thoſe to the Weſtward later : Therefore, firſt, bring the Place of your own Habitation, on the Terreſtrial Globe, to the Meridian, and the Index Hor. to the Hour in your Meridian ; ſuppoſe Twelve, then bring the other place to the Meridian, and the Index will point to the Hour in the other place, be it ſooner or later.

**XXVIII.** *To Survey or Measure a Trapezium, or Field of four unequal ſides.*

Firſt, Meaſure the Top and Bottom, and add thoſe two together, and take the half ; then meaſure the two oppoſite ſides, adding them alſo together, and take the half : thoſe two halves multiplied the one by the other, the Product will give you the true Contents in Poles or Peaches, for we ſhall ſuppoſe you work by that meaſure. A Pole is 5 Yards  $\frac{1}{2}$  long, 40 ſquare Peaches make a Rod, and 4 Rods an Acre ; ſo that 160 ſquare Peaches are an Acre.

Note, That 100 Links of Mr. Gunter's make a Chain, 10 ſquare Chains an Acre. The Chain is 4 Poles long, or 22 Yards : And 220 Yards in length, and 22 in breadth, make an Acre.

**XXIX.** *To Protract Angles by the Line of Sines.*

Here you must take 30 deg. of that Line for your Radius, and half the Angle you propose to draw, as if you would draw a right Angle; work by 45.

**XXX.** *To take an inaccessible Height at two Stations.*

Note the Angle of Altitude at your first station; then go forwards in a streight Line; suppose 60 Yards, and there take the Altitude again with your Quadrant; then protract all upon Paper. First lay down your first Angle; next your Distance, and then the Angle at your second station. And from that Point where the Angles intersect one another, let fall a Perpendicular to your Horizontal-line below, and measure the Perpendicular by the same Scale, by which you laid down the Distance, and you obtain the true Height required.

**XXXI.** *Of Trigonometry.*

The general Rule is this: Every Side is proportional to its opposite Angle, and every Angle to its opposite Side: And again, As the Angle opposite to one Side, is to the Angle opposite to the other side, so are the Sides themselves to one another, and *e contra*, the Sides are to the Angles,

Hence it follows, that any three of the six parts of a Triangle being given, any one or every one of the rest may be found out by the Rule of Proportion, as it is wrought by Logarithms, or by the Lines of Numbers, Sines and Tangents: But note, that the Rule of Proportion in Common Arithmetick will not find Angles.

Observe also, when you meet with an obtuse Angle, to find its opposite side, you must work by its Complement to 180. If you wou'd find an Angle, you must begin with a Side, & *e contra*.

**XXXII.** *To Draw an Horizontal-Dial.*

The Analogy or Proportions to find the Hour-lines are these: As Radius, or the Sine of 90 deg. is to the Sine of the Latitude, (suppose 51 deg. 30 m. so is the Tangent of the hour, (*viz.* 15 deg. which makes an hour in the Æquinoctial) to the Tangent of the Hour-line from the Meridian, *i. e.* the distance of the hour of 1 from 12) which in this Example is 11 d. 51 m. And so is 30 d. the Tangent of

of two Equinoctial hours to the Tangent of the distance from 12 to 2, &c. Note, You must take 11 d. 51 m. from your Line of Chords, and put it from the Meridian on both sides for 1 and 11, &c.

XXXIII. *To Form an Erect South-Dial.*

Say, As the Radius, 90 deg. to the Co-sine of the Latitude in this Example 38 deg. 3. m. so is the Tangent of any Hour given (suppose 15 deg. for the Hours of 11 and 1, or 30 for 10 and 2.) to the Tangent of the Hour-line, or to the true distance of the Hour-line, from the Meridian, which in this Example is 9 d. 28 m. and 19 d. 40 m. &c. The Style must be fixed over the Meridian-line, and make an Angle with the Plain equal to the height of the Pole.

Observe, An Horizontal-Dial in one place, will be an Erect South-Dial in another. If you would make an Erect Dial for the Lat. of 52. this is nothing else but to make an Horizontal-Dial for the Lat. of 38 deg. Hence it follows, that at the Lat. of 45 deg. the Horizontal and the Vertical are the same.

XXXIV. It may be some help to know the time of the Night, by observing, that the Stars come sooner and sooner to the Meridian, anticipating the time by an Hour in 15 Days, and in a Month by 2; and that the Motion of the Moon in 24 Hours is slower than the Sun's by 48 min.

XXXV. *To find what Day of the Month the Sun enters any Sign, is intimated in these Versicles:*

*Amphora, sic Aries, Taurus capit insuper unum,  
Sed Gemini, Cancerq; duos: duo sumit & Hircus.  
Tres Leo, tres Virgo, tres Pondus, tresq; Sagitta:  
Scorpius at quatuor: minus uno denique Pisces.*

Another Mathematical Head hath contriv'd much the same thing, but more obscurely, in these Verses,

*Evil, attends its Object, unvail'd Vice,  
Vain Villains jest into a Paradise.*

These short Hints (tho' not instructive to the unlearned in these Arts yet) will exceedingly assist Reminiscence, and quickly restore the decayed Notions of the Intelligent to a clear and practical Knowledge.



